

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1783:

TCTGGAATGT CTCCTTGCT CTCTATATAG CTATAGTCCG TCGCAAGCGG ACGTAATGTT

60

10 CATTTTCATA ATGATTATAG TATGAAAGCG CTTTCTTGTA TATGTGACAT GTGCGTGTnG

120

(2) INFORMATION FOR SEQ ID NO: 1784:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1784:

CTACCATTAA CATAAAGACC GTCTAATTCT TCAGTTCAA TGGCATTTCG GAGCAAT

57

25 (2) INFORMATION FOR SEQ ID NO: 1785:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1785:

35 TCATAACCAT TACCAAGTAT CCAAGCAGCT TTTAAACAAT ATGGCATAAAA CATT

54

(2) INFORMATION FOR SEQ ID NO: 1786:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 84 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1786:

GGATGGGTGA TTTAGCAGG TTTGGCTATG AGTACCGTAT TTGCATTAGG ACCGATTCA

60

TTTAACAAAA TCATAATTTC GGGC

84

50

(2) INFORMATION FOR SEQ ID NO: 1787:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 134 base pairs

55

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

6

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1787:

CCGGTTTACC CTTAAAATTA TTTTTGGGG GGTTCATTA AACCTTCAA TTCCCAATTA	60
ACCCChACCC CCCTGGGTTT TCCTTAAAAA CCAAAAGGCC CTTTTTTTC CCAACCCAAC	120
CTTGGGGGAA TTGG	134

(2) INFORMATION FOR SEQ ID NO: 1788:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1788:

TATATCAACT AAAAGCGCA TCTGCAACCG ACGGTTGAAA ATTTGGACAG GAGACAGATA	60
ATGTAAATATA	70

(2) INFORMATION FOR SEQ ID NO: 1789:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1789:

AATATCCAAT TATACAAGCA GGTATGGCAG GAAGTACGAC ACCGAAATTA	50
--	----

40 (2) INFORMATION FOR SEQ ID NO: 1790:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1790:
 TGATTTACTA GCTGAATCCG ACATGCTTGA TGATACACTA TGTGAATTCA

(2) INFORMATION FOR SEQ ID NO: 1791:

55

- 5
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1791:

10 CGGGACGCTT TACTTCCAAC TTTAGGTGGT CAACACAGGT TTAAACATGG CGATGTCA 58

(2) INFORMATION FOR SEQ ID NO: 1792:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1792:

CATCATCCTC TAATTAGTC CAAACTCCTG GATGATATCC AAATGAAGTT CCAATTGA 58

(2) INFORMATION FOR SEQ ID NO: 1793:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 62 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1793:

35 CACAAGTTT AGAAGGAAAC CAATAACAAA TGACGAGATT AATTGCCACA AACATTAACG 60

AC 62

(2) INFORMATION FOR SEQ ID NO: 1794:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 103 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

50 AAGGCCCGGG GGGTTAAAAA AAAAAGGTTT AAAAAGGnT TTGGCCCTTT AAACCCAAAG 60

GGAAATTTA ACCCAAAAAA AAAAAAACCC CTTTGGAAA GGG 103

(2) INFORMATION FOR SEQ ID NO: 1795:

55

- 5
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1795:

10 TATCGATCGA TCATGTCGAA TCGATCTGTC GATCGATCGT ATCGATCGAA TCGCGTCGAA 60
 TCGAATnCGT CGAACATCGATG CTATCGATCG AATGCTATCT GAGTCGAATC ACGTCGATCT 120
 G 121

15 (2) INFORMATION FOR SEQ ID NO: 1796:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 20 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1796:

AATTCAATGTT AAAATCCTCC TGATATTAGA TGGCCCATT TTATTTTTTT CGTTTCCATA 60
 TA 62

30 (2) INFORMATION FOR SEQ ID NO: 1797:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 397 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1797:

40 CATACTCGAC AATTTAGATG GTGAaTACTT ATCATTAAAG TCCTTTGaCA CCTCATCTAA 60
 AATTCTAGGA CTTTTAACAA TTTCTTTATA CGTATTACA AGTTGAATAT TACTTTGAAC 120
 CTCTTGCGCC ATAAACTGAG GATTGTCACC CTTAGTTGA TTCACTAAAA TTTGAGTATT 180
 45 AGCTTGATAT TTAGGTGATA AGACGAAAAA TGTAACAATA GCGCTAATAA TTAAAAATAA 240
 TAGCGGTAAA ATAATTAAAA TCTTCAAGTT TTTTTGTAAT ACTTCTTAA TTTTTGTTAA 300
 TTCTAATGTA CTTTCCATTA TTTACCTCCC TTAAAAATT TCATTAAAAT TGGTATTATA 360
 50 TATATAGTAT TTACATATTA CATATCGTTT AAACAAT 397

(2) INFORMATION FOR SEQ ID NO: 1798:

- (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1798:

10	CGGGTAACAG CGAACGGTGT GTCACCGTAT ATAACCTTAC TATTTAATAT TTGGCCTGTT	60
	GCTTTC	66

(2) INFORMATION FOR SEQ ID NO: 1799:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1799:

25	GTTGCTAAGT TTGTATTACA ATTTAAATGA TTTTAGCTT GAGTAAGTTT ATTTAAAGAT	60
	GCAGTAATTT CGCTAGG	77

(2) INFORMATION FOR SEQ ID NO: 1800:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1800:

40	TAATGCTATT TAATTTCTA CTTCTAAGC TTCCACCCAT AACGAGTAAn ACTTTTTTAT	60
	TTTCATTAAC GCCTGTTAAT TGATAACCAT TATGTGCATT ACCATTTTT AAATCTTCTC	120
	GAATTGTTGC TCCAATAAAA TCAGCTTCT CTTAGGTA GTAGTTAGC GT	172

(2) INFORMATION FOR SEQ ID NO: 1801:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1801:

AGTAAAAATT GTCATCACGA TCAGCAAAAG CTTTGATTIC TGACGTATCT TCCATAAATG 120

ATCTAAAAAT TGGTAGTTCG 140

5 (2) INFORMATION FOR SEQ ID NO: 1802:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1802:

ATCCCCCGTA CAGACTTCAG CTTACGTAAA CATGCTGAAC ACTCTAGTGA AGATTTCAAA 60

20 (2) INFORMATION FOR SEQ ID NO: 1803:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1803:

30 CAATTTAAAT GCATCTTCC CATTAAATTTC ATTTGTTGTC GCTTTAGCTG TGTTAATTAA 60

(2) INFORMATION FOR SEQ ID NO: 1804:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1804:

ACTTGATCGA AAAGGTTTCA TACCGGTAAA CGATAAAAGTT GAAACAAATG 50

45 (2) INFORMATION FOR SEQ ID NO: 1805:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1805:

(2) INFORMATION FOR SEQ ID NO: 1806:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1806:

AAGAACTGTC TATGAATATT GGATGACGCT TTGATGAGAA CATTAGTAAG CCATTTGTTC

60

15

AAGGAGTACA

70

(2) INFORMATION FOR SEQ ID NO: 1807:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1807:

TAGCATTCT AATGGAATCC AATCTTACCG AATGACAATT GGAATATAAC TGGTGATAAT

60

30

GTTGAATGGT CCTGTGA

77

(2) INFORMATION FOR SEQ ID NO: 1808:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1808:

CCCGGCCCAA AACCCCTTTT TTGGGTAAAA AATTTTTTTT AAAAAGGGAA AAATTTCCCC

60

45

TTTTTTGGTT CCCAAATTTT AAATTAGAAA GGGCCCCCCC TTCCCCCCCC AATnTTTCCC

120

A

121

(2) INFORMATION FOR SEQ ID NO: 1809:

50

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1809:

AAGTTGGTG AAGGAACAC GTGCATGATG GTGTCAAAC AATGCGTTAC GATGTTGACG

60

5 (2) INFORMATION FOR SEQ ID NO: 1810:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1810:

TGGTTGAGAA AACACAGCGT TAAAGTTGAG GTATTCAAA AGACAAGTTG GAACATTA

58

20 (2) INFORMATION FOR SEQ ID NO: 1811:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 55 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1811:

CTTAAATAGC AAGTGGTTTT ATAACAACCT TGAGTTATCT CAATATAGTT ATCGC

55

30 (2) INFORMATION FOR SEQ ID NO: 1812:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1812:

TAAGTCITCA ATTTTTTCAG TTGATAACACC TAAGTGATAC AGCCATTCTT

50

45 (2) INFORMATION FOR SEQ ID NO: 1813:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1813:

(2) INFORMATION FOR SEQ ID NO: 1814:

5 (1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1002 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1814:

TGGTCATGCG	GGAAATACTA	GGACATGAAA	ATTATGCTAA	AGGCATCAAA	GTAAC TGAAA	60
15 ATAATGGCGT	AGTGGATATA	GATATGTACA	TTATTGTAAG	TTACGGTGTG	AAAATATCTG	120
AAGTTGCCA	TAATGTACAA	TCAACAGTGA	AATATACTTT	GGAAAAATCA	CTTAATGTAT	180
20 CAGTAAATTC	AATCAATATA	TATGTACAAG	GTGTACGTGT	GAATAATACA	GGCAAGAAAG	240
CTTAGGAGGA	CAACTTGAAA	TGATTAGCAA	AATTAAATGGT	AAATTATTTG	CCGATATGAT	300
TATACAAGGG	GCACAAAATT	TATCTAACAA	TGCAGATTTG	GTAGATTCTT	TGATGtGtA	360
25 TCCAGTGCCA	GATGGtGATA	CAGGAACAAA	TATGAATCTT	ACTATGACTT	CAGGTCGCGA	420
AGAAGTAGAG	AATAATTGT	CGAAAAATAT	CGCGAATT	GGTAAAACAT	TCTCGAAAGG	480
30 TTTACTAATG	GGTCAAGAG	GTAACnCTGG	TGTCATCTTG	nCACAAATTAT	TCAGAGGATT	540
TTGAAAAAT	ATTGAAAGTG	AATCTGAAAT	TAATTCAAAA	TTGTTAGCTG	AAAGTTTnCA	600
35 AGCTGGTGT	GAAACGGCAT	ATAAAGCTGT	TATGAAACCA	GTTGAAGGTA	CAATACTTAC	660
AGTTGCAAA	GATGCTGCGC	AAGCTGCAAT	AGAAAAAGCA	AATAATACTG	AAGATTGTAT	720
AGAATTAATG	GAGTACATTA	TTGTAAAAGC	CAATGAATCA	CTTGAAAACA	CACCAAACCT	780
ATTAGCTGTA	CTTAAAGAAG	TTGGTGTGT	TGATAGTGGC	GGTAAAGGTT	TGTTATGCGT	840
40 TTACGAAGGA	TTCTTAnAAG	CGCTTAAAGG	TGAnAAAGTT	GAAGCCAAAG	TTGCAAAGAT	900
AGATAAAAGAT	GAATTGTAC	ATGATGAACA	TGATTTCCAT	GGTGTAAATT	ATACTGAAGA	960
TATTAATTAA	TGGCTATnGT	ACTGAGATGA	TGGTCGTTT	TG		1002

45

(2) INFORMATION FOR SEQ ID NO: 1815:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1815:

5	GACAAACGCTA TTATTTTAG TTTTCAATT CTATTATGTC ATAATTATGT CACTCAAAAA	120
	CTGTTTCCA ACATTGATTT ATTGTTGGAA AATCTCGAAA ATCTAGTCTA TTTCTCCAAC	180
	AATCGAAGAr TTATGCCCTT TTTCTCCCT TTaATAAGT CATAATACGA GGCATACATG	240
	CAACATTTAC AATAAAATAT GTTCCTACAT CGTATTATAC GAATGCTCAC ACTTATAGTT	300
10	GTTTAGTAAA CCCAGATGTA TTGCTAACAT ACCCATnAnC nCTATATAGT T	351

(2) INFORMATION FOR SEQ ID NO: 1816:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 62 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1816:

ATATCGTATC CCATGCGGGA AGGGCTTAT TTATACTGTG CACGATGAAT GCGCACAACG	60
25 GG	62

(2) INFORMATION FOR SEQ ID NO: 1817:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 70 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1817:

AAAGGGGGGA AATTTTTTTT TTTTGGGTTT GGGGGAAAAA TTTTTTTTGG GTTTGGGAAA	60
40 TTTAAATTAA	70

(2) INFORMATION FOR SEQ ID NO: 1818:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1818:

CAAGTTCGGA ATGCGAACGC GTCTTAATCT ATATACAAGT GATGCACTCC A	51
--	----

(2) INFORMATION FOR SEQ ID NO: 1819:

- 5
- (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1819:

10 TCGCCATACT ATCGACAGCT GCTAAAATTG CGCTCTTCTT GTGTCGCAAT CG 52

(2) INFORMATION FOR SEQ ID NO: 1820:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1820:

CAAATTGGGG AAATTACTAG AAATGAAGAT ATTTATAAAG ATGACTGGAC GTCAACTT 58

25 (2) INFORMATION FOR SEQ ID NO: 1821:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1821:

ACTGCTTCAG CACCTGTATT CATTGGGAA AGCTTTATCG TTGACCGGCC AGTTTACA 58

(2) INFORMATION FOR SEQ ID NO: 1822:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1822:

50 ACCTGTTGCT CGTGTATAA ATAGGTGACT ATAAATCTCT GTTCAATATA CTTTCGTTT 60

55 TTCCAATCTT AAAGGTGAT GTTCGTGAGT AATCTTATCT CTGGnCCAAT TTTAATGTCA 120

TGATATGTTCA ATAGTATCAC CCCTTTGTTG TGTAATAATA ATCAGGTGGG TGGTTAGAAC 180

GGTGTGAATA 190

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1823:

AGCnTTAGCn TATGGTTTAG ACACAACTGn TAAAGATGCn AAGTTCTTGT

50

15 (2) INFORMATION FOR SEQ ID NO: 1824:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1824:

25 AAAAAATTGGA AAAAAGGGGC CCAAAGGTTA ACCCAAATTG GAAAnAAACC CAAATTTTTT

60

GGAAATTAAC CCAAAAATTG GCCCCCAATT GGAACCCAAA AT

102

20 (2) INFORMATION FOR SEQ ID NO: 1825:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1825:

40 ACGTACCAAT GTCATAATCA GTCATTTAC CACTCTTAAT AATCTGCTTC CGGGCAA

57

40 (2) INFORMATION FOR SEQ ID NO: 1826:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1826:

55 ACCATCTTGT ACAAAAGTGGA TGTCATATGC ACCATCTTGT GTTTTGAGCT GCATTTAATT

60

G

61

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1827:

ACCGTTTCGC CAAGCCGACC TAATTTCTCA GCAATATTTC TTTCTACGCC ACCAAT

56

15 (2) INFORMATION FOR SEQ ID NO: 1828:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1828:

ACTTATAGGG CGCACCTTATT TTTCGCTTCC ATAGCGAAAC TAGTGTCACT TATACGTATG

60

TG

62

35 (2) INFORMATION FOR SEQ ID NO: 1829:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1829:

GCTACACACG ATTTACCTTT CTTGTCACGT TTTGGGACCA TCATTGTGAT GATA

54

40 (2) INFORMATION FOR SEQ ID NO: 1830:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1830:

GTAATGACCA TCGCTGATTT ATGACATTGT TAGATCTCAT GTGCCATTAA GTCTGCTGAA

60

55 TCTTGCGG

67

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1831:

ATAACTCTTC G_nCAAACCTCC TCAACAACT TCTTGTGTT CATCTTCTGG

50

15 (2) INFORMATION FOR SEQ ID NO: 1832:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1832:

25 AACAGT_nAGA ATATTTAATG GAGCCAAGAA TGGTTTACAG ACGGAGAAAT GGGATATGTT

60

GAAGCGAGGC GTACCGGGAA AGCGTACTAG GCTAGAACAC T

101

25 (2) INFORMATION FOR SEQ ID NO: 1833:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1833:

40 TCGTCATCAT GTCTGTGTTA CCAACGTTTG ACGATTTAnT TCATGC_nGAA

50

40 (2) INFORMATION FOR SEQ ID NO: 1834:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1834:

55 ATAAGTTAAT TGATTTATTG ATAAAGAGAA GCCAGATTAA AATATTATTA AACGT

55

55 (2) INFORMATION FOR SEQ ID NO: 1835:

- 5
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1835:

10 AAACAAGAAC CCCCATATGG TTAAGCTGCG CGTTCAACA TACGGGGGT TTTCATAT 58

(2) INFORMATION FOR SEQ ID NO: 1836:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1836:

TACGTTTAT AAAAACAAAGA ACTAAAGTAT GCAGTGTGAA TTGTTCACTT TCnTGGCGTT 60

25 GGAATTGATT AAAACGAGAT ATGGTGTGT GGAAAGTTGTT TGTGTTGCA TATTTAAC 120

CGATT 125

(2) INFORMATION FOR SEQ ID NO: 1837:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1837:

40 AATCTACAAT CCTGAATCAC TCGTTAAGAT TAAAAGTATC GACAATGAGT ATCTGAACAT 60

GAGCTCATCT GCCGTTTTA ATGCnAAAAA CCGGCGGCCGG GATATTTTG ACCACGGC 118

(2) INFORMATION FOR SEQ ID NO: 1838:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1838:

55 ATTTGGGGTT TTGGGACCT TACCCAAAAA TTGGGGTTG GTTATTAAAA AAAAGCCATT 60

GTCCCCAGTTT TTGGGGATTGC C

141

(2) INFORMATION FOR SEQ ID NO: 1839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1839:

TCTGGGGACT AAGTATGTCT CAGGCTTTAT GCTGTTATGT TTGAAAATGGA AAGG

54

(2) INFORMATION FOR SEQ ID NO: 1840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1840:

ATTTAAAAAAAC CTTTTTAAAC CGGGAAACCCCA AGGAAAATT CCAGGGTTTTA ATTTAAACCT

60

TTTGTAAATT GGTTCCAAAC CAACCTTTG GGTTAATTTT AACCAGGAAT TTTGGAAAAC

120

dGTTTTATTT GGA

133

(2) INFORMATION FOR SEQ ID NO: 1841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1841:

AAAGTATGGA TTGATCGTGG AGAAGTTCTT CCTACTAAGA ACACATAGTCG

50

(2) INFORMATION FOR SEQ ID NO: 1842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

GCGTTTCCT GGGATATGTT TGATGAATGG ATGTTGTAAC ATGTTAATAA ATCGTTGGTA

60

(2) INFORMATION FOR SEQ ID NO: 1843:

5

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1843:

CTGAGATGAA TATTGTGTTT CGCCATACAT ACTGGTAAT ATCCCAACCA TTGCTGTAAA

60

(2) INFORMATION FOR SEQ ID NO: 1844:

- 20 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 125 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1844:

CATTACCTGT AAAAGGAAGC TAAAGACGAT GAGTATTAT AGAAACCAAT TGCCGACCAT

60

30 TTGCAGCCAT TAGGAGGGTA GGAGGGCAAT CGCGnCCAAA GGTTATTAAC CGTCAATTAC

120

CTTGA

125

(2) INFORMATION FOR SEQ ID NO: 1845:

- 35 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 126 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1845:

45 ATCCACCTGG GTTTGTTCTT AATTAAACCT GnTAATTAAT TGGGTTGGGT CCGGCAAAG

60

TCCGGACCTG CAAATCGGAT TTTATCGTTA AATCTTGAAT TCTATTGCCC ATATTAATC

120

GCAAAT

126

50 (2) INFORMATION FOR SEQ ID NO: 1846:

- 65 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 57 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1846:

5 TTTGGGAAT AAACCAATT ATCATGGCA AAAATAAGC AATCCAAGTA CTTACTA 57

(2) INFORMATION FOR SEQ ID NO: 1847:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1847:
 TGATAAAATAT TTCACTAAA GAGAGGGAGT CATTATGACA CTACTTACTG

50

20 (2) INFORMATION FOR SEQ ID NO: 1848:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1848:

30 ATCTAGGCCA TGAATGGACG GACTTAATAT TGATGTGCAA CAAGAAGAGG AGAACCGAAT 60

CAATA 65

(2) INFORMATION FOR SEQ ID NO: 1849:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1849:

45 CGTGTGAAGT CATTACTTT AATCCCAGTGA TGATGGTGAT GGATGAGACG ATATCTCT 60

GTCTTTAACCA GTTAAGTCCA ATTCTTCCAA CGAAACTTTT CCATAGGTTG TTTTATAAGT 120

TGGAATACTT GCACAAATCA TaCCTAATTG CTTATCAATT TTCTCAAGAC TGTCATCAGT 180

50 TATAAGATCA ATTTTATTAA TAATAATCAT GTCACTTAGT TTCRACTGAT CTTCCATCAG 240

GCAGA 244

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1850:

TTTAAAGGTT CCCGAAAGG TTTGAAACCA AACCTTGCC CCGGCCCCCC GGGAAAAAAA	60
AAAnTTGGTT TAACCCCCGG GGGGGGGGGC CCTTAAAAAA ACCCAA	106

15 (2) INFORMATION FOR SEQ ID NO: 1851:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 84 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1851:

TTTTTTAAGG CCCTTGGGGG GCCAATTTTC CCCCCCCCCC AACCTTCCAA AGGTTGGGG	60
GCCTTTTTTT TTAAATTGGG GGGAA	84

30 (2) INFORMATION FOR SEQ ID NO: 1852:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1852:

TCATGATTAA AATTCAACAA TTACAACATC ACTTTGGATC ACATAAGAGT AA	52
---	----

45 (2) INFORMATION FOR SEQ ID NO: 1853:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1853:

ATAAAACATT TCAAGATGCG CTTGTAATTG TATGTGATAC TGCCAATGCT CCACGA	56
---	----

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1854:

AAAAGATCAT GCGCATAATG ACATGGTGAT GATATGAGTA TGATGGTGGG TACA

54

(2) INFORMATION FOR SEQ ID NO: 1855:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1855:

ACAAACAAATG GTAATGCATA AACATACAGC CAATAGCTAC AATTGCACGA CG

52

25 (2) INFORMATION FOR SEQ ID NO: 1856:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1856:

ACGGCTGCAC TCATCATGGT CTGTGGCGTG ATTGTTAATG TTTTAGTTGC CCGCTTC

57

(2) INFORMATION FOR SEQ ID NO: 1857:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 192 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1857:

50 GCAGATAACT TCCTTGATCC TAACAAAGCA AGTTCTCTAT TATCTTCAGG GTTTTCACCA

60

GACTTCGCTA CAGTTATTAC TATGGATAGA AAAGCATCCA ACAACAAAC AAATATAGAT

120

GTAATAnACG AACGAGTTCG TGATGACTAC CAATTGCACT GGACTTCAAC AAATTGGAAA

180

(2) INFORMATION FOR SEQ ID NO: 1858:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1858:

CGCTGCACTT CCTGAAACGCA GTGAGACCAAG AACGTGGTGT CACTTCGGT CTATTCCGGT
 15 TAAAGTGTGGA TCTCGGA

60

77

(2) INFORMATION FOR SEQ ID NO: 1859:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1859:

TTTGGCGTTC GTGATTTCT CTAGACGTAG TAACTTCCC ACTCTTGCG TCC

53

(2) INFORMATION FOR SEQ ID NO: 1860:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1860:

40 TTTCTCACTC GCGCATTCA GTTTGTTTG ATTTACCCGT CTCTTCTATT TGTCTTAAT

59

(2) INFORMATION FOR SEQ ID NO: 1861:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1861:

55 AATGAATGTA TGCACATCAA CATCATCAAT TAATCCTTTT AATAAATTGA GTTGTAATT

60

(2) INFORMATION FOR SEQ ID NO: 1862:

- 5 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1862:

ATTAATACTG AGCAAATGTG CATAAGACAT CATGAATTAG CACCAATTAA CAGG

54

15 (2) INFORMATION FOR SEQ ID NO: 1863:

- 20 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 89 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1863:

TTTAACCATC ATTCTATGTC AAAGTTTGAA AATGATGGTT ATTTTTTATT GCTTAAATT

60

ATTATTGCTA CTACTATACC AATGAAAGT

89

30 (2) INFORMATION FOR SEQ ID NO: 1864:

- 35 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1864:

40	AAAGCTGGTA CGCCTGCAGG TACCGGtCCG GAATTCCCGG GTCGACCCAC GCGTCCGGAA	60
	CAAAAATTGC ATCTGATGGT CTCAAGGGTC GTGTGTTGAA AGTGAGTCTT GCTGATTTC	120
	AGAATGATGA AGTTGCATT AGAAAATTCA AGCTGATTAC TGAAGATGTT CAGGGTAAAA	180
45	ACTGCCTGTA CTAACCTCCA TGGCATGGAT CTTACCCGTG ACAAAATGTG TTCCATGGTC	240
	AAAAAAATGGC AGACAATGAT TGAAGCTCAC GTTGATGTCA AGACTACCGA TGGTTACTTG	300
	CPTCGTCTGT TCTGTGTTGG TTTTACTGAA AAAACGGCAA CAATCCAGAT ACGGGAnGAC	360
50	CTCTTnTGCT GCAGCACCAA CAGGTnCCGC CAAATCCGGA	400

(2) INFORMATION FOR SEQ ID NO: 1865:

55

- 5
- (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1865:

10 AAATGGCGTA TCCTTATGTA TCAACTAAGT AATCACCAAT TTCTTTCGGA T

51

(2) INFORMATION FOR SEQ ID NO: 1866:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1866:

GTGTTGCGGA TAATCCGTCG ACATTAGCGT CTGAAGGTAT CATGAGGCAA CTGCCAA

58

(2) INFORMATION FOR SEQ ID NO: 1867:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1867:

35 ACAGCAACTG ACCCAGTTA CTACCGTCAC TCAAATCACA CAGGTGGTAT CAAATCAATC

60

(2) INFORMATION FOR SEQ ID NO: 1868:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1868:

CAATCTTTA CCATTTATCT CAGCTGGTGA AAACGGTCCA TTACACTTAG AATAAA

56

50 (2) INFORMATION FOR SEQ ID NO: 1869:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1869:

5 GCTATAGACT AGAGGTACAG CAAATTCAATG TGTACAGTGA TTAGAAGGCG ATGAGCAAAA 60
 GTAAT 65

(2) INFORMATION FOR SEQ ID NO: 1870:

10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 173 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1870:

20 GCTACTGGCG GGGGATAGTA ACACCCAATG TTACACGTAT ATACGTACGG CTTCTTGATA 60
 AAAAGATGAA GCChTTACAA GTAGAGAGCG TAAGAACGTG ATCATCTAAA TGGTAAGGGT 120
 AGACTATCCC ATGCCATTGT GGGCGGTTGC ATAGGTACCA CGGCACATAG CGG 173

25 (2) INFORMATION FOR SEQ ID NO: 1871:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1871:

35 GCTGTGGGAT TGTCTTTGG CATGGGTTA GGGAGAGCGT TTCTAAGGGG CGTTTGAAAG 60
 CCATTGATCC GTAAAAGGAC CATTGTTGGA AGChGCCCTTA AGAA 104

40 (2) INFORMATION FOR SEQ ID NO: 1872:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1872:

50 CCATTATCTC AAGAGGTTCT AGTAAGGGGA TGGCATTGCA TTCTTATGAA TTTGACCAGA 60
 ATAA 64

55

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1873:

GACAAACCTAT TGTTCCTCTA CCATACTGTT GTCCGGTTTG ACAAAACGGC GTTCCACAAT 60
CCATACATCG TGCACCTGG ATAGAGGCAT CTTCTTAGT AAATCGTTGT TGATATGCTT 120
TATGATGCTT CAAACGGTCT ACCAGTGATA ATTACACCTAA GTACTGTTTG TCATACTTCA 180
TAAATCCTTT AAATTCAACCC ATCGTATCTC CCCCTTCCT TAATACACAA CGGCTGGTTT 240
ATGTTTAGCA TCGATTGTTT TGACTGTnCA TCGTAAAATG CAGCTAACAT CGCTTCATCT 300
TCCATTGTCA TGTGAAGATT TTGTGGCAAA nGGAATTTTT TGCATCAATG AATnGGTGAA 360
CCTTTGGGGG TGACCTT 377

(2) INFORMATION FOR SEQ ID NO: 1874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1874:

ATTATCTGAA TACGCAGCAG TTGCAGCACT TGATGGATCA GCAGTATTAA AAAGAGGTTA 60
ACACATTACC CAATAGTG 78

(2) INFORMATION FOR SEQ ID NO: 1875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1875:

CTAAAAGAAG TTAAAGAGTG TGATGGTAGA ATTATATTAT TTATTGATGA AATgCCATAT 60
 GCTTGTAGGT GsTGGTAAAA CAGATGGTGC CATGGATGCa GGCAACATGC TAAAACCAAT 120
 GTTAGCACGA GGAGAGTTAC ATTGTATTGG TGCAACAACT TTAAATGAAT ATCGAGAATA 180

TGTGAAAGAT ACAATT

256

(2) INFORMATION FOR SEQ ID NO: 1876:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1876:

15	AGCGCGAAAT TGAGCAAGCG GAACATGCGA CTGATGAAGA AAAACAAGTT GCTTTAAATC	60
	AATTAGCGAA TAATGAAAAA CGTGCATTAC AAAACATCGA TCAAGCAATA GCAnATAATG	120
20	ATGThAACGT GTTGAAACAA ATGGCATTGC TACACTAAA GGTGTACAAC CTCATATTGT	180
	AATTAAGCCT GAAGCACAAAC AAGCAATaaa AGCAAGTGCA GAAAATCAAG TAGAATCAAT	240
	AAAAGATACA CCACATGCAA CAGTTGATGA ATTAGATGAA GCGAAT	286

25 (2) INFORMATION FOR SEQ ID NO: 1877:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1877:

35	ACTTCCAAAC ATGATAAAAGA CAGACTACTT CACAGGTTA AGGGAAGCAA CCACATTAGC	60
	GGGATTTCACC CTAT	74

40 (2) INFORMATION FOR SEQ ID NO: 1878:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1878:

50	TTTCATTAAG TTCAAAAAAT CTCATAACT TTAAGGATTG GTCCGCATAT TA	52
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55 (2) INFORMATION FOR SEQ ID NO: 1879:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1879:

ATACCCCTGA GATTAATTAC TTGTCCTTTT TTTAGAACAA CATCTCCTGG CTTTGTTCG

60

10 (2) INFORMATION FOR SEQ ID NO: 1880:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1880:

AATATCATTA ATAATATCAT TGATGCAAGT CCTATTGTGC ACAACTGGGG TGATTGCCTT

60

25 (2) INFORMATION FOR SEQ ID NO: 1881:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1881:

ACAATGGCAC ATGGACTTAT GCCTGGGTG TCCTGTTCGT CGCAGCATCA AAATGA

56

40 (2) INFORMATION FOR SEQ ID NO: 1882:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1882:

TGCAAAGCAT TGGCACATGG CCAGTCAGTT TTACAAACGTC GTGACTGGGA AAACCCGAGA

60

nGCGACGTTG TAAAACGACG GCCAGTGCCA AGCTTGCATG CCTGCAGTCG ACTCTAGAGG

120

50

A 121

55 (2) INFORMATION FOR SEQ ID NO: 1883:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs

(C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1883:

ACATTAAATG TATAACCAAGT TTCAACATTG CCGATTAGT GGCAGCAGTT GCAGGA

56

10 (2) INFORMATION FOR SEQ ID NO: 1884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1884:

TGCATCCATT TGATTGAATT TTATGTTTG ACCAAAGCCG GTTGCAATGT AC

52

(2) INFORMATION FOR SEQ ID NO: 1885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1885:

TGAAAAGTGG TGGAATGGTG TAAAAAGTTG GTGGGTAATT TTAGAGAAGA G

51

(2) INFORMATION FOR SEQ ID NO: 1886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1886:

TACACGAACC ATACTCACCA GGTTTTCGTG TCATGAGGCG ATATTTTTG TCATTTATA

60

TACATTTATC CAAATTCA TC TTTAAATGT TGAGT

95

(2) INFORMATION FOR SEQ ID NO: 1887:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 65 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1887:

5 GCTACCAAAAG GCGTTTACCC TATTGCTAGT CACTGCAAGT GGCTTAGCTA TGCGAGATCAA 60
 CTGGT 65

(2) INFORMATION FOR SEQ ID NO: 1888:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1888:

GTGGGACCAA CTGGCCGGTG ACGGTGGTAA AGGTGCTTCA GTCGTATTGA AGTGGGATGA 60
 20 (2) INFORMATION FOR SEQ ID NO: 1889:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1889:

35 TGTTGGAGAA ACAGTTAACG AGGTTTAATG TTAAAAAAAGC AACGTATCAT GGGTATA 57
 (2) INFORMATION FOR SEQ ID NO: 1890:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1890:

45 TGGGATCTGC TTGCAAATAC ACAAAACTTT CTGGATTTA TTACAATTGC AATATAATCA 60
 AACAA 64

(2) INFORMATION FOR SEQ ID NO: 1891:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1891:

GGCATCCACT CAGATAAAAT AAAGATGTCA AAAAGGCAA GATGGTGCTA AAAAAACAA

59

5 (2) INFORMATION FOR SEQ ID NO: 1892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1892:

GGTATCTCAA CGATCCTTTA GGTTAACATTG GAAATTTCATA CACGTGAGTT AGCA

54

20 (2) INFORMATION FOR SEQ ID NO: 1893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1893:

TTGTCTTGGC AATGGCAGAG CAACAGAACT TAAAGTGCT TGCTGATCAT AT

52

30 (2) INFORMATION FOR SEQ ID NO: 1894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 79 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1894:

TAAACCTATA CCCTGTAAAA AGAAAAATCG TGGATCGAAA GAACATGTAT GTGGCATTTA

60

45 TGATTGATGC TCAAGCAGA

79

(2) INFORMATION FOR SEQ ID NO: 1895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1895:

TTATAAAGGA GAGAAATCCT TAATTATGAA TAAAGCATCA TTTGATAAAA AAGTTAAAAA	60
5 GCAATTATGG TTTTGAAACA AGAAGGAGAA ACAAGCATT A GATCAACGAT TGTCTTCTAT	120
ATCTGATGAT GACAGCGTTA ACTTAAATAA GCCTGTTACC TTTGCTAATG CTTACTTAAG	180
10 ACAAAATGTA TTTCGAAATA AAGAAACAAA AAGTTATAGT ATGTTGTTA CATTAGTAGT	240
GATGATGTTT GCTTATGTTG CTTTATTAGG TTTGTnTTTA TTTGGGCTAA TTACAAGTCT	300
15 ATCTGGCGTA CAATTTTCG TTAGTCCTAA GGTAGATTAA TCTACnACTG TTGTTATTTT	360
AACAATnATT GGAGCGA	377

(2) INFORMATION FOR SEQ ID NO: 1896:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1896:

TTAGGATCCG TCTTGCCGC AGCGTGGGTG TTCCCGAGC GCTTCTTAGA GGTTTTGC	58
---	----

(2) INFORMATION FOR SEQ ID NO: 1897:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1897:

40 ATCGCTAAA CCGAAATTGA AAATGCATCT ATTACTTCAT TAAGCCGTTT ACCAGACGTT	60
ATATTAGCAT TGAAAAGTGG AAAGGTTGAA GGTGCTGTAG TTGAAAACC TGTAGCAGAA	120
45 GCATATTAA AACAAAATCC TAAATTAGGA ATTTCCAATG TGAAATTAA TGAAGAAGAA	180
AAAGATACAG TGATAGCAGT GCCAAAAGAT TCACCAAAAT TATTGTCACA AATTAATAAA	240
ACGATTAAGG AGGTTAAAGA TAAAGGATTA ATCGATAAAT ATATGACTAA TGCTGCAAAT	300
50 GCGATGAATG ATGACAGTGG TTTTATTCT AAGTATGGTA GTTTTTCTT GAAAGGAATT	360
AAGATTACAA TATTAATTTC ACTTATCGGT GTTGCATTAG GTTCTATTTT AGGTGCATTC	420
GTTGCGTTAA TGAAATTAAG TAAAAA	445

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1898:

ACCTTTCAA TGTTGCTTTC ATATAAATTC ACAAAAGTTGA CTTTTTAATT CTTCAATAGA 60
TTCTCTACTG CGATAGCTGA ATTGCCATCT TTCTCTACTAC T 101

(2) INFORMATION FOR SEQ ID NO: 1899:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 75 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1899:

TGCCCTGGAT GCCTTTAACT TGATTCACTGA CCTGTGGTTT TATTTCATTAGATGAGCT 60
ACCTTCAAGA CCTTC 75

(2) INFORMATION FOR SEQ ID NO: 1900:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1900:

AGCAATACGG AACTGATGAA CGGAATTGTA ATACGAGAAT ATGAAGCCTC AACG 54

(2) INFORMATION FOR SEQ ID NO: 1901:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1901:

AGTACCTGAG TATCGCAGAC CGGGTTCAAGG TCGTAGAATT TCTATACTGTG GAGCTAGAAG 60

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1902:

GTCTAACTAC AGCATGCCGG CTTATTGTTG CACTTCTCA ATATTTCCAT A

51

15 (2) INFORMATION FOR SEQ ID NO: 1903:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1903:

GGATThAAAC GTGCATTAAC GCGTGThTTA AATAGTTATG GTTTAAGTAG

50

30 (2) INFORMATION FOR SEQ ID NO: 1904:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1904:

ATCGTATTAA TTTCAGCGAG TAGCGGTAGC CTTCAATACA CAAAGATTTC ACC

53

45 (2) INFORMATION FOR SEQ ID NO: 1905:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1905:

ATAAGACGCT AGATCTGGTC AATTATTTTC CGATTTTTTC AACACTATTTC

50

(2) INFORMATION FOR SEQ ID NO: 1906:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1906:

TTCATCTGAA TCGTCGGCTT TCGCGATTAC TTCTTCGTCA GGGTTGCTAT C

51

10 (2) INFORMATION FOR SEQ ID NO: 1907:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1907:

CAATTGCTAA TAATCCTTTT AAGTCATTAA TGATTTGATC TTCCGTAATG TTGAA

55

25 (2) INFORMATION FOR SEQ ID NO: 1908:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1908:

TTGCCAAACA GACATGACTT AAATTTCAAT ATCTTCTTTG ACTGCATCGA TAT

53

35

(2) INFORMATION FOR SEQ ID NO: 1909:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 94 base pairs
 (B) TYPE: nucleic acid
 40 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1909:

TGAATTTCTA TACAATTATG GGGAAAGGTA TTGGTGAATT GGAATGGCT CCTAAGTTA

60

CAAGCCCCCA TTCGATGGCC GTTAAAGTTT TTAA

94

50

(2) INFORMATION FOR SEQ ID NO: 1910:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1910:

5 AACATGATCG TGGGGGGATG TTATGTTTGT TCATATATTT AGGAAGTCGT TTGTAGTTAT 60
 TGTTTG 66

(2) INFORMATION FOR SEQ ID NO: 1911:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1911:

20 ATCTTCGCTC CACTTACTGC AATAAGGATT TGCGGCAATC CTAAACCGTT TTTCA 55

(2) INFORMATION FOR SEQ ID NO: 1912:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1912:

AACAATCGTA ACGATACAAAC GCAATCTTCG AAAAATAATG CAAGTGCAGA TTTCCGAAA 59

(2) INFORMATION FOR SEQ ID NO: 1913:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1913:

45 ACACCACACA CACACACACA ACACCCCCACA CAACACACAC AAACACACAA A 51

(2) INFORMATION FOR SEQ ID NO: 1914:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1914:

5 TGTTACGACT TGGTCGACCT GGCAAGCGCT TCGCGCACGT TCTGCAGCnT CTCACTTATT 60
 GGTATCGCGA TGGCACGTTA AGAAATTTCG GAGTTCTGGT CACCTTATGT T 111

(2) INFORMATION FOR SEQ ID NO: 1915:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1915:

TGGTCCGCTC TCAATCGCAT CTTCAGGTTT TACTTGGCAA AAGAGCGCGG TGCTCA 56

20 (2) INFORMATION FOR SEQ ID NO: 1916:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1916:

GCCGACAGTA AAATAAAGGT ACTTGATATA ACATATAACG GAAAGCAACA GTTACTGTCA 60
 CA 62

35 (2) INFORMATION FOR SEQ ID NO: 1917:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1917:

ATGATATTAA TTTGATTGAA GAGATGTTGC TTAAACAAGA AGACGTACAA TTGATAAnAAC 60
 GTAAAGATTAA TATTCAAGCAC CCTAAAGAAA ATGGTTACCG CAG 103

50 (2) INFORMATION FOR SEQ ID NO: 1918:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1918:

CAGTGTAGCG TGTGTCATGC CGTTTTACCA CAATTGAAGA CTGAGCTCTA TCCCTGTGCC 60

5

(2) INFORMATION FOR SEQ ID NO: 1919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1919:

TCAAATTAAC TTCCAACAAA AACAAATGCA AGGTGAACAA ATTGCTGAAG AAGATTAC 60

AAAAGCGCAA GAACAAGCGC AAGCAATTGA AAAAGATGAA AACATCTCTn CATTAA 117

20

(2) INFORMATION FOR SEQ ID NO: 1920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1920:

TGCCTAATGA AACATTTAAA AATATTTTA AATATATCTA TCAACACATC GTTCTATTAA 60

TTGGGATTGT TAGTTTCTC AAAGGATTTT TAGGATTTTT CATGGAAAAA AATGGAAGTA 120

35

ATTTATATTT TGTTTCATTC CCGTTTCAG TAGTCGTGG ATTCTTTATT GTCCTTTAT 180

TTATATGGTT TAGTTTAAA ACAATACAAC TGCAGTGTAA TAACAATTCA AATTGGATAT 240

GGATATTCAC CTATTTAGCA ATCATTCTAC TAATTGTAGG ATTCTTCTAT GTATTCTTA 300

40

TTCCACAATC ATTACTTGCC TTTGGACCAT ATATTCAAGT AAGCAATTGG GTATTTATTA 360

TATTTTCATT TATAGTTATG CCTATnGGAT TACGCATTGA 400

(2) INFORMATION FOR SEQ ID NO: 1921:

45

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

TCACAGTCAT CATTttATT TCGATTTCATA ATAATTGTAT TTTAATTAA TCTTGATATT	60
CATTAAGATT TATACAAGCT ATCTTTAACCA TTGCCTTATC TTTGATATAT TTCTTGCAATT	120
5 CG	122

(2) INFORMATION FOR SEQ ID NO: 1922:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 410 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1922:

AGAAGATACC ATACACATT TTTAGTTAC AGCATAAAATC AATTATACCA CTAAATTATT	60
ACATTGTTA TATTTAAAT TCGGGGGAGT AATTTAAGT AATATCTTGT TGCTGCTAAT	120
TCTATTGTTA ATAAATTGAT ATTAGATGTA GAAATTGAGT GTGAAAGTTA ATAATAGATG	180
ATTTAGCTAG TAACATAATT AATTCAATA TAGTCAAAAA GTTCTGTTAG ATACTGTTCT	240
25 TGATGAATAT TCTTTGATGT TAGGTGTTAG CTATTCTAGA TGAGTTCTT AGATGTGGAT	300
GCCTGTCTTG ATGAAGTTAT CTATGATGTT AATATAATAC TTGATGTTGA TTCTTAGATG	360
TTAGTGCAT TTCAAGATGC TGATTCTTG TTGTTGCACT ATCTTGGTGA	410

30 (2) INFORMATION FOR SEQ ID NO: 1923:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1923:

TTTCTATGGT TTATCAGGTG ATTTTACGGA AAACAGTGAA GATTATGGCG TATACCGCTT	60
TAAACGTGGA TTAAATGTAC AAATCGAAGA ATTAATAGGG GATTTCCTATA AACCAATTCA	120
45 TAAAGTAAA TATTGGTTGT TCACAAACATT GGATAAAATTA CGTAAAAAAT TAAAGAAAATA	180
GATGTAAATG ATGTTAGGGC TTATAGTAT TGATACTATA GGCTCTTTT TATATGTTTT	240
TTAATAAAGC CTCGAATAAT GATATATTAA ATGACAAGTT TAACAAGTGA TTGCAATAAA	300
50 TATAAAATnTG AATTGACCAA CCGATTGnA AATGATTGAG TTGAGGAA	348

(2) INFORMATION FOR SEQ ID NO: 1924:

- (A) LENGTH: 253 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1924:

10	AGGGCAGATT TAAGCTAACT TCGGAATGTTT TCGAGTTTTT GAGTTAGTTTC TCTATCCATT	60
	TTTTCAAGTTA CATGAGTATA TATGCGAATG GTTGTTTGTT CATCTACATG TCCTACCCTT	120
	TTCATAATTG CTTTAAAGA AACATTCAATT TCTACTAATA AAGTTATGTG TGTTATGTCTA	180
15	AATGTGTGCG TGGTAACCTT CTTATTCAATA TTTAAAGCTT TTGTACGTTT TCTTAACGCA	240
	CACCGGCCAT TTC	253

(2) INFORMATION FOR SEQ ID NO: 1925:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1925:

30	GGTATAGGTG CAAGTCCTAT CTTCCGCTCC ATGGTTTAAT GATAATGCGG GA	52
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(2) INFORMATION FOR SEQ ID NO: 1926:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 84 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1926:

45	TGGTCACTGT TCCTGATGCT TACGTTAGAA TGTAAGATTG CCGATTTATC AGTTATATAC	60
	TGTTTGCTTC ACTTTGGAGA TCTG	84

50

(2) INFORMATION FOR SEQ ID NO: 1927:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

CTTTCTAAAT AATTCTAGTA TAGTTTTAT TCAAATACGC TAGGCTCAGA GCTATT

56

(2) INFORMATION FOR SEQ ID NO: 1928:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1928:

15 GCAAATTGTC ATTAGACGGA GTATTATTAA GAATTTCCGG TGATATCCAC CGGCACAAGA 60
 TCGATGTTGG ACAATATCTA ATATACTGAT ACGCATTTAA ATAGAAGAAG GGAATTAGAG 120
 TTTGGTTTG AATGCAAA 138

20 (2) INFORMATION FOR SEQ ID NO: 1929:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1929:

35 ACATCTTAT ATGCTAAC ATCAAATACA CCACATATTG GTAAACAAACA AA 52

40 (2) INFORMATION FOR SEQ ID NO: 1930:

- 45 (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1930:

TITAATGTC ACAACACCGG AATAATAATA ACTAAAGCGC CGCTAATAAA T 51

45 (2) INFORMATION FOR SEQ ID NO: 1931:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

ACGAAAAATA AATAATCATT TCACCTTAT AGCCAGTATT TTTAATTAAT ATATTTCAT	60
CTATTAGCGC TTCTAAAAT CTATTTGACT TTTGAACATA CTCTTTAGCT ATATTATCAA	120
5 CAACAGTATA GGATTCCTCA TAATTTAGTT GATTAAATTC TGAGTCGTTC ATTAATTCAA	180
CTAATCCTTT TATTACTTTT TGTACAACAT TAATATTTT ATCAAAATCA AATTTATCTT	240
10 CCTTAGATAA ATTAATAnnn AAAGTCTTAA GAACATTTGT AAAAGCTCT GCAACACTTA	300
TAGTTTGGnC AAATTCTTA AATTTATTTA CACAGTACTC ACACATTAGT TTTAAAATA	360
20 ATGGATTGTT GAATTCTGGA TTTAATATAG GTAACTTAGG	400

(2) INFORMATION FOR SEQ ID NO: 1932:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 100 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 20 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1932:

25 ACTTGCGGAA nGACGCAACG TTTATGTACG TTGGAAGAAA AATTCAAGGAC TTACGTTCAA	60
AACTACCATA GCAATATGCA TTGAAAGATG ACAGTATGCG	100

(2) INFORMATION FOR SEQ ID NO: 1933:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1933:

40 CGCTCTGCTT TAAGCGTTGG GACTTTGTCA ACGGTAGTGG ATGGGAAGTG GTTCTGCTTT	60
G	61

(2) INFORMATION FOR SEQ ID NO: 1934:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1934:

(2) INFORMATION FOR SEQ ID NO: 1935:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1935:

ATGTATTACG GTTTAATTAA GCCACATAAC AACAGATTG CATTATGGT ATCTCA

56

15 (2) INFORMATION FOR SEQ ID NO: 1936:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1936:

TCGCACCAGA AACAGGGAT TGTAAAATT GCGTAAATCC TTAAATTAT TTGTAAATAT

60

A

61

30 (2) INFORMATION FOR SEQ ID NO: 1937:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1937:

ATGAATAATC ATATTTCTAA TCAAAGTAAT AGCATTATAA TTGTGTTAA A

51

45 (2) INFORMATION FOR SEQ ID NO: 1938:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1938:

TTGCTGAAGA TAGAGGCTTC ATGAAGGTGG AGAAGTTAGC TGATTTCTGG AACAGG

56

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1939:

ATCTCAATGT ATTCTCTAG TGTAAGTTCT TCATAAATAA CCGGTGATTC C

51

(2) INFORMATION FOR SEQ ID NO: 1940:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 318 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1940:

25 CTCAGGTCGA CTCTAGAGGA TCCCCTGTTA AATAAAACTT CTTAAGCACA TACTTATTTC 60
 ACTATGCCCT TTACGTTCCC CTTATACTTT TCTCACATCT TTCTCTTAGA CTACTCCCTT 120
 ATACGCCCG CTCAATATCT TTAATCATT CATCTACAGT TATTTTCGCA CTCGTTAAGA 180
 30 CAATAGGAAC GCCTGGCACC TGGATGCGTA CTTGCACCTG cAAAATATAw ATCITTATAA 240
 TCTCGCGATA CATTyTGTGG ACGATAATAA TTACTTTGCG CTAAAGTTGG GCATTAACC 300
 GAATGCCGAA CCAAATTC 318

35 (2) INFORMATION FOR SEQ ID NO: 1941:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1941:

CCGGGAAAAT TTTTGGAAATT AAGTGGAAAA AAAATCCCCT TAAAATTCCC CTGGCCA

57

(2) INFORMATION FOR SEQ ID NO: 1942:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1942:

5	TGTTCTTCTT TTGAATCTGT TTTATTGTT TGTCCTCTT TTTCTGTTA ATCTTCATA	60
	TTTCCACATC CCCAATAAA AATGATTAAG AGTAATACAC TCATGTACAA AGCAATTTT	120
	TTTATATACT CCATCATTTC ACATCTCTCT GTTTAATT TATAAACATT TGAATATTTC	180
10	ATACAACCTTA TTAAAATAGT GATTATTCAA CTTTATGTT ATCAAACAAA ACTAACCTAT	240
	TCAATTTAAT ACATGTAATT CATTAACT TTATTATTAA ATGTTCTAAC GTnATTTTT	300
	ATATTAGTAA TTATATTAT TTATCCTCGC TTGGATTAAG GTAGATACTA TCTGTGAAGT	360
15	AnATATTTTC TGCCTTGN	378

(2) INFORMATION FOR SEQ ID NO: 1943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1943:

20	AAGAAGAAGT CAAAATTCAG CTAAGTAAAA GCTCGAGTTA TAAAAAGTC TAAATTGATT	60
	CAACAGGAGT AGAAAAGGAA ATTAGTCTTG CATATTTAG AAAATGAATA AAAACAGTTA	120
	CTATATGCAA CTCAAGAATT AAATATTATT TAAGCCACAT ACCTATTAGA GTACAAAATA	180
	TACAAGTTGT ACTTATATCT AGGTATGTGA CTTTGATTT TAAGCGTAAA GTAAAAGTTT	240
35	TTATGTTGT ATTAGTTCTA AATTATTTTG CACTTGGATG ACACGTATTT TTGAGTTTAA	300
	GTGGTGACTC AAGTTCAATA AAATAAATAT CAGATAGGAT AATTGAnAA TnATATGAAA	360
40	GGGTTATCTC CAAAATnATC TCCATATTAT AAGG	394

(2) INFORMATION FOR SEQ ID NO: 1944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1944:

55	TATTCGTGAT GACGATTGTC GGTGACATGA AGTTCTATTT GCTGGCACTG AT	52
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(2) INFORMATION FOR SEQ ID NO: 1945:

- 5
- (A) LENGTH: 82 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1945:

10	CGTTTAAAAAA ATGATATCAA TCTTTATTGT GGATTGCAAC ATCCGTGTGC TCCATAAAAC	60
	GTGTGGCGAG ACTTGGGAAA GG	82

(2) INFORMATION FOR SEQ ID NO: 1946:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1946:

25	GTATTATTGA TGAAGAAACA GCTCTCCAGT TGTAGATGCA TGCTACGTTTC ACGTTACCAC	60
	TGTATCAATT	70

(2) INFORMATION FOR SEQ ID NO: 1947:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1947:

40	TATCACCAAGC ACCAAGGnTA ATGACATGCT GATTTTGTC AGTTATGGTn	50
----	--	----

(2) INFORMATION FOR SEQ ID NO: 1948:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1948:

	ATTGTATGAA TCTTGGGGA ATGAACTTn AACGAACGGA CATCTTGCAA TGACGCATCA	60
55	AAATGGTTT AACACATGTA ATCGGCTCTC GGTACTATTG GTGTGATGTA CACATGG	117

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1949:

TTTGATGATT TCGGGATGGA TTGGTATTGT GGTGAATGAA TTTTTTAGCT CATCATCAAA	60
TTAG	64

15 (2) INFORMATION FOR SEQ ID NO: 1950:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1950:

CTCTAGTGGC CATTCAATT TGTCGCTGAA TGATGTTGGT ACATCCATTG CTGCTGT	57
---	----

30 (2) INFORMATION FOR SEQ ID NO: 1951:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1951:

CTGTCCTTCT GAAACTTGGG TATTTAATTAA GGAATAGTTA AAAAAATCAT TCACAGAAC	60
ATTTAATA	68

45 (2) INFORMATION FOR SEQ ID NO: 1952:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1952:

TTAAATTAAC CTTAAGGTTG GnATTTTAA CCCCCAAATT TTTGGGGTGG TTAAAATTCC	60
--	----

(2) INFORMATION FOR SEQ ID NO: 1953:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1953:

GACATTTACA CCTGCTTCAA TCTGGTCCAG TGCAGCATCT AATTCTTCGA

50

15 (2) INFORMATION FOR SEQ ID NO: 1954:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1954:

26 ATTIGGCCAA CTGTTTCAGCA CGGTATTGGT TCAATGCAAC ACTTTATCAT TGCTTCAGGG

60

CTATATCGGT GGTATGGGnT GTATCACTTC TTAGAACGTG GTATTAA

107

30 (2) INFORMATION FOR SEQ ID NO: 1955:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1955:

41 GAAGTGAATA TGAAGCTGCT AAAGACTCCG GAATGCTACC TCAGACAACT GATG

54

45 (2) INFORMATION FOR SEQ ID NO: 1956:

- 46 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 365 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1956:

55 ATGATTATTT TAGTTCCATT TGTTGAGTCG ACTGCTAAAG TTCCATTAA ATGTTGTACA

60

ATAAGCAGTA ATTTATGATT GTTTACAGTT TTTAATTAC CATGAACCTT TGAAGCATTT	180
GCATGTTAA TAACATTATT TATCGCTTCAGCGTAATCA TAACTAACAT AGATTGTTA	240
GTAGGACTTA ATACTTGCGC TAATTCCTTA TTTCAAATG TAAAATCAAT ATCAGCATCA	300
nTnAAAACCTT TACGTATACT ATCAATCTCT TCAATAAAATG ATGGTAATT TACATCATCA	360
ATAAT	365

10 (2) INFORMATION FOR SEQ ID NO: 1957:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 346 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1957:

AAATAATGTC ACAAAAGTTA AAGATACTAA TATTTCCTCA TATACTGGTG TAGTTGCTTT	60
TAAAAGTGCA ACTGGATTG TAGTTGGAAA GAATACTATT TTAACAAATA AACATGTGTC	120
GAAAAATTAC AAAGTGGCGC ATCGTATTAC TGACACATCCA AATAGTGATA AAGGTAATGG	180
TGGTATTAT TCGATTAAAA AGATTATTAA TTATCCAGGT AAAGAAGATG TATCAGTCAT	240
TCAAGTTGAA GAGCGTGCAA TAGAACGTGG ACCAAAAGGC TTTAATTAA ATGATAATGT	300
AACGCCATTC AAATATGCGG CAGGGGCTAA AGCTGGTGAG CGAATT	346

30 (2) INFORMATION FOR SEQ ID NO: 1958:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 390 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1958:

TTTTCCAGTT AATTTTTCCA GTTCACTAAA TACTTTATTG ACTGTACCAAG ACCCAATAAT	60
AATTTGGTAT TGTCCCCAG TAGAAAACGT CCCTTTAACT ACATCCATAT TGTTTAGCGC	120
CTCTTCATTT ACTAAACTTT CATCATTAA AACTAATCGT AGTCTCGTTG CACAATGCGC	180
CATTGCATCT AAATTCTCTT CTCCGCCTAT CGCGTTCAAA ATTCTCTCTG CGGATTGCTT	240
ATAATTCTATA TATTTAGCCT CCTAATTAGA ACCGGTTCCA TTTATTCCAC TTTATTGTAA	300
CCGGTTCCAA AAATATTGCA AACACTCTAT TATCATTAA TATAAACACC TACACCATT	360

(2) INFORMATION FOR SEQ ID NO: 1959:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1959:

GATTGCATAT AATAGTAAAA ACATTACATC TTGAACAGTA CTCGTTTGT

50

15 (2) INFORMATION FOR SEQ ID NO: 1960:

- 20 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1960:

AATTTGAACC AGACACTGAT ACAAGTCACA CCCAGAAACT TTTAAGGACG TAAATGT

57

30 (2) INFORMATION FOR SEQ ID NO: 1961:

- 35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1961:

AACGCTATAT TAGCGATATA CAATGATGCC ATTATCAATA nTACAnCTGn

50

45 (2) INFORMATION FOR SEQ ID NO: 1962:

- 50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 60 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1962:

TACAACGTCA GTTGGCAGAC ACCAGAAGAA GGATTCAAA GTATATTCA GAACTTGT

60

(2) INFORMATION FOR SEQ ID NO: 1963:

- 5
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1963:

10 AATTTTCCC CCTTTTAAA TTTCCAAAA AAAAnCCCCC AAAnAAAAAAA 50

(2) INFORMATION FOR SEQ ID NO: 1964:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1964:

CAACAAGTAG ATGCATCAGA GAGTAGTGTT CAAACGTTAA TAGATGTGGC ATG 53

25 (2) INFORMATION FOR SEQ ID NO: 1965:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1965:

35 AGCAAAGGCA TAACTGCTAA TGACCATGTA AATGAGACGA GTCGATCGTG GCCA 54

(2) INFORMATION FOR SEQ ID NO: 1966:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1966:

50 CTCAAATAAC TGGCTCAACT CAACCGGTCT ATAACACCAT AACACCGCAT GCCACTCTAG 60

50 CATACTCAAT CGCTCTGGTA CCAGCnCTCA AATAACTGGC TCACGCCAAC TGTCTATAAC 120

ACTAACACGC ATGCACTCTA GCCTACTCAG AGCTCTGGTA CAGCACTCAA TAGCTGACTG 180

55 TCACAGTCCA CACACACTCA ATACTGGCTG ACACAGTTCA CACACnGCTT ACTCGCTCTC 240

(2) INFORMATION FOR SEQ ID NO: 1967:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1967:

CAGTTTAAAC TCGATGTTGT GTACTACTGT GCCAGCTGGA ATGTTTTATA ATGGTGATG

59

15 (2) INFORMATION FOR SEQ ID NO: 1968:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1968:

GTTACATGGC ATCACGCCAA ACCTGTCTAT AACACCATAA CACGGCATTG CC

52

(2) INFORMATION FOR SEQ ID NO: 1969:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1969:

ACAATTAA TTATATAACT CCAGGGCTA CAGTAATACG ATTTCTCCAG ACTCCAAA

58

40 (2) INFORMATION FOR SEQ ID NO: 1970:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1970:

TGACGTATAA TGGATGAAAG TCTATTAAGT TTAAGAAGCT AATACTGTGA AATCTTTCT

59

(2) INFORMATION FOR SEQ ID NO: 1971:

55

- (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1971:

10 TATCATGTTA TCTTCAATCG TTCACCAACA GTCATTGCT GCATCAGTAA CG **52**

(2) INFORMATION FOR SEQ ID NO: 1972:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1972:

TTGCTGGTGC CATAGACTAC ACTTGTGGA TATCAGAAAT GGGATCTGTT CCATTACC 58

25 (2) INFORMATION FOR SEQ ID NO: 1973:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1973:

AGTTAAACCG AGTCCAACCC AAACCTCCAA TCCACCTAAT GGTTAAAATT CCAAACCATT 60

ACCAAGGGAGG GACCAAAAAA CGGAATGGGG CCTATTGGTA GGGTACCTAT CCCATTTAAA 120

AATCCATCCA AAAGCCCCAA TTATCGGACC ATTTTCGCCA AAAATAATTT AAGCGGAAAT 180

TGAATACCTT AAAATTCTCn GGGCCCAC^T 209

(2) INFORMATION FOR SEQ ID NO: 1974:

(i) SEQUENCE CHARACTERISTICS:

- (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1974:

ATCTGAGTAT TTATAACATA AATCACTAAT ATCGTTATTA CATAGGGATA GGGTAAAAGT 60

(2) INFORMATION FOR SEQ ID NO: 1975:

- 6 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1975:

TTCCCTGCATC CGAGTCTGAA TCGCTGTCGA ATCACGTCGA GTCGATCGCT ATCAGGTCGA	60
15 GTCGCGTCGA ATCGnTCGCT ATCGAGTCGA TCGCGTCGAA TCGAATCACG TCGAGTCG	118

15

(2) INFORMATION FOR SEQ ID NO: 1976:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1976:

TTGCAACnTT TGATCTAGAT ACTACCTTAG TTGGATTGTA CTACTTGATT CTACTTCACC	60
30 TTTAGTTGGT TTTGTAGCAG GCGTTTTGTC TTTACCTGAC TCACTAGATG CGTCATTTTC	120
TTTTTCAACA CTTGGTAATT GTTTATTGTC ATCTTTTGCG CTGTCTTGTT TTTGTGATTC	180
35 TTTTTCAACA GGTGATGGTG TTGGTTTGCT AGGCGTACTG GAGTAGCTTC CTTCTTAGCT	240
GAGTTATCTT GTTGTCTTT TTTGTTAGAT TTATCGGTAT TGGCTTTGT AAATGCTTCT	300
nTATCAACGA TTCTGACATG GTATTGTCCA TCATAATCAA TCGTTTTAC GTGAACTTA	360
ACGATAGCAT CATATAGAGT TTACCTTCAA CATATGGGAA	400

40

(2) INFORMATION FOR SEQ ID NO: 1977:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1977:

TAGACAAAGA CAGAACAGT AAAGTACGCT TCAGAACTGA TGGCTCACTG CGAGTATAAA	60
55 AACTTGTAGT GTCC	74

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1978:

ACTCAAAAAC TCGGAAACCA TTCCAATTAA GCTTAAATCT GACCCTTTTT TTGACCCTTA	60
TATTTTTTAC AA	72

15 (2) INFORMATION FOR SEQ ID NO: 1979:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1979:

ATGTCATTGG CTITGAACCTT TATCTTCAAG CACCCAATCG TTTTAACCTT TCAAAATTG	60
GCACCATAA	69

30 (2) INFORMATION FOR SEQ ID NO: 1980:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1980:

CAGAGAGTTG TCGCTCATTA AACGCCACnT GATGAGTTTT CGCTTACGAA GTGCCACGCG	60
GTATGGATAA TTTTCACCTG TTGCTGAGTC TTTGATAAGC CTCGACTGT	109

45 (2) INFORMATION FOR SEQ ID NO: 1981:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1981:

(2) INFORMATION FOR SEQ ID NO: 1982:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1982:

GAATCTGTTCAAGTTAGAAT TATCCCGGCA TAATGATAAA GGCGAGTAAA TGG

53

15 (2) INFORMATION FOR SEQ ID NO: 1983:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1983:

GnCTTTTGAA TAAAGAAAAA TTCATCAATA GAAAAACCGT CTTTATCGTC TATTTTTTTA

60

ACTAGTAAGT TCGGC GTTCT TAGAGACTCA AATATTGATT TTACGTTTTT CTTTGTACA

120

CCACTAACAC TAAATATTCT TCCATCTAAA TCTACTAATT CTGGTACCGC AAAGACATCT

180

AAACC ATGTG TTTTTCTTT GTATTTATTT TCATCTTTTC CCAATAAAA CACTTGGAAC

240

TTTTGATTn GT

252

35 (2) INFORMATION FOR SEQ ID NO: 1984:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1984:

CGTGTAAATC AACTAATTCT TAGTTTTAAC TGTCGTAATA ATCAACTGAA CACTTCAAT

60

CTA

63

50 (2) INFORMATION FOR SEQ ID NO: 1985:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1985:

5 TCCTAAAATG ACCGCTAATG CCTATGGATT GTTATCACCG ACCGCAGGGA CAGCACGACC 60
 TAC 63

(2) INFORMATION FOR SEQ ID NO: 1986:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1986:

20 GGCATATAAA AATTAGAGAA ATTATTTCAA ATGAACAGAT AGAGGCACAA GATGAATTAG 60
 TTAAACGATT AAACGATTAT GⁿTTTAAATG TCACTCAAGC AACTGTTCT CG 112

(2) INFORMATION FOR SEQ ID NO: 1987:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1987:

30 TTTATCAATT TGTAACGAAC ATGAATTACA TGTTTCAGGA AAATATATTT CATCCCATT 60
 35 TTAAAAAGTA TAAGATTTA TGAAAAATTAA AACCAATTAA GTATAA 106

(2) INFORMATION FOR SEQ ID NO: 1988:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1988:

45 AATGGCGTAG TTACAGCATT TATGATTGTG TTAATCTTT CTTCTGATAA ACATAATCTG 60
 50 TTTGACCAAA AGTATTTAAG TGTTCAATTAA ATTAGTTTTA TTATTTACGT CGTATGGCAA 120
 GTTTTATTGA TAATGTTTTA TTATCATTCA AAACCAAAAA ATAATTCAATT TTCAAAATTT 180

TGGTTAGGTG GACATCAGAT TCACTTCCAT GAAAGTAAAT TAATTGAATT TGTTGGTTTC	300
TTAGGAATT TTATGTTAC ATTCAAAAGT GTGCAGTTAA TTATGGAAAT TCGTGATGGT	360
5 TCTATCAAAG AAATTAAAGT ATGGAAATTAA ATTCAATTAA	400

(2) INFORMATION FOR SEQ ID NO: 1989:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1989:

TTCAGCTTAC AATAATGAGC AGGTTGGGT GGGCTCCAAC GCAGAGAATT TCGATAAGAA	60
20 ATTCCACAAA TAATACAAGT TGGCCCACTC CCATTCTGTA ATAAATATAG GAGGTCATTG	120
TTATGCAAAT AGAACTTACT GATGCAGCAG TAACTTGGTT TAAAAATGAA CTTGAGTTGC	180
25 CTGAAAATAA TAAAGTGCTC GTGTTTTTG TAAGATATGG TGGCGAATTCAACTCAAGC	240
AAGGATTITAG TCCTGCTTTT ACAGTTGAAC CAAAGGAAGA TGGTGTGATATT GGCTATGAAC	300
30 AACAAATATGA CGATTTAAAT GTTGTCTAG CGGAAAAAGA TTTGTGGTAC TTTGAAGATG	360
ACCACATTAT TGTAATGTA GTTGTACCGA AGATGAATT	400

30 (2) INFORMATION FOR SEQ ID NO: 1990:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1990:

CAATTTATTA TGTAACATAAT TATAGCATTG ATGAACAAAGG CGCTCAACGT AATAnTACAA	60
TTAATGGATT GTTTCACAAG ATGGTAAAGC TAGGATGTCT TTTTATTAAG A	111

45 (2) INFORMATION FOR SEQ ID NO: 1991:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TAAACAAATT CATCAATTGT TAGTGGCATA TCCTAATGTA ATTAGAGAGG AGTT

54

(2) INFORMATION FOR SEQ ID NO: 1992:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1992:

GAACGATAGA TTGATGAAAA GTTTAAAAAA GTACGTATAT GTTTATTAAG TTTGAGTTT

59

(2) INFORMATION FOR SEQ ID NO: 1993:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1993:

CGAGACCAAA ATATTCGAAC GAATAATTTC AGTGTTTGC TCCTTTATTA TAGATTCAAG

60

CTATGGATAA TAG

73

30

(2) INFORMATION FOR SEQ ID NO: 1994:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1994:

ATCCATACAA ATGTAACAAG CACAATTGC_n GCCATACTT_n GCATGACAGT

50

(2) INFORMATION FOR SEQ ID NO: 1995:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1995:

55

(2) INFORMATION FOR SEQ ID NO: 1996:

- 5 (1) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1996:

TCAnTTAAnA TTAATGThCG TTGGGGCTCT AATAAAATTT GTTTACAACG

50

15 (2) INFORMATION FOR SEQ ID NO: 1997:

- 20 (1) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 61 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1997:

26 TCATGATTG AAATGACTTT CAATGACTTG GGTGGGACAC TTGTTGCACA GCTGGATGTG

60

C

61

30 (2) INFORMATION FOR SEQ ID NO: 1998:

- 35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1998:

41 CATGCATTGA TGnTCTAAA GAACATGATG AAACAGGTCA nCACATGnCA

50

45 (2) INFORMATION FOR SEQ ID NO: 1999:

- 46 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1999:

51 GGTTCGCTAC TGATTGGGTA TACATCTGAT TTAGCAATCT TGCGCACTTG TT

52

55

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2000:

ATGTGGTTAG ATATCTGCAC ACTTGAACGT TATTGTCGGGA TATACTTGGC CAT

53

- (2) INFORMATION FOR SEQ ID NO: 2001:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2001:

ATCTCAGTAA GGGTAAGCGT CAAAGTCTGC ACGGATGCTA ATGTTTACCA GGTT

54

- (2) INFORMATION FOR SEQ ID NO: 2002:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2002:

CTAAGATTG TAATGCTTGA ACAATTGGTT CAGTGAATT TTGGAAATTG TGGAAACTGT

60

TACCATCATC ATCTGTTATA AAACTAAAGT TTAAATTGCC AGTATCATGA TAAACAGCGC

120

CACCACCCAGA AATTCTTCTT ACTACATCGA TGGTGAGC ATCGATATAT GTCTGATT

180

CTTCCCTCAT CGTATTTGAA TTCTTTCCAA CAATGATAGA TGGTCTATTT ATGTAAAATA

240

AAAAAGTAAC T TTCTTCTGCT GGTAAATTTT TTAAAAACATA TTCTTCCATT GCTAAGTTA

300

AAGTGGATC TGTAAATTAA TTAACTAA TGAATTTCAT TACAATCTCT CCCTTATATC

360

TATATATATTCCTCTACTTATTTATGCCTTAACCTTGCTCA

400

- (2) INFORMATION FOR SEQ ID NO: 2003:

- SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2003:

CCGAAATAGG ACGGGCAGTT GGATTTATTG GAAATGGGTG GCGTTAATAT ATACAGT

57

5 (2) INFORMATION FOR SEQ ID NO: 2004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2004:

TAGTAGTTGA AGGCAGCCGC GGTCCACAAG CTGCAAACGT TGTAAACTA TAATTCTTAG

60

ATTTGAATCA TTGATTTAA CTAACACCTT ACCAAGAAGT AAGGTGTTT TA

112

20 (2) INFORMATION FOR SEQ ID NO: 2005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2005:

AAATCTTGAC ATAGGCACAG GAATGTATAT TGATCTCGAT CACTTAAGTC

50

(2) INFORMATION FOR SEQ ID NO: 2006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2006:

AAGGTGGGTT TAAATTCccc AAAAAAAA GCCTTTAAC CTTTGGGG GTCCCCTTC

60

CTTGGAAATTG GAAAGGGGCC AAAATTGGAA TAAGGGGTT GGAAAAACCC AAGCC

115

(2) INFORMATION FOR SEQ ID NO: 2007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2007:

TGAAGAAATA GCAAATGAAC TCAATATTTC TATTGAACT GT CAATATTCA ACCAATTATA 60

5 TCGCTTCAAT AATCAAGATT TAAAGCATCT TGAACAAGAn TTTGA 105

(2) INFORMATION FOR SEQ ID NO: 2008:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2008:
 ATTGGCTACT AAAGTTAAGG ACATGATGGA TTGGATTAGT GGTATGCGCT TTGAAAAGAT

20 CAATTAT 67

(2) INFORMATION FOR SEQ ID NO: 2009:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2009:

TATAAAATTAG CGTCCTTCAT ATCACAAACGA TGATGCTCTG TGCGAAGATC TGATTTATTT 60

CAATGTGCGC ACG 73

35 (2) INFORMATION FOR SEQ ID NO: 2010:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2010:

CTTTGTTTAT GTTTCGTTTA ATTTGTAACC CTCTCTTGG ATACCGAGGT T 51

(2) INFORMATION FOR SEQ ID NO: 2011:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2011:

TAACGACCAA GCTTAAAGAG ATACGCTCTT ATGCGATTGG ATAGGTCGTT AAAGTTAACT

60

10 ACAATACCTC ATAAGTAGAT TTAGAATC

88

(2) INFORMATION FOR SEQ ID NO: 2012:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2012:

GTCAACCCCTT GCCAAGCTTA TATCACGATA CTGGGATGTG ACTTCCGGTG AATTAC

56

25 (2) INFORMATION FOR SEQ ID NO: 2013:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2013:

35 AGCTTATAGT ACTTGTGACT TCATAATGGA TGAAGTTGAA GTACCAAAAG AATTAACACA 60

ATTACACGAA TAATTTAAAT AGAGAGTGTG ATAGTAGGTG GAATTATTAA ATAGTTATAA 120

TTTTGTTITA TTCGTATTAA CTCAAATGAT ATTAATGTTT ACAATACCAG CTATAATTAG 180

40 TGGTATTAAG TACAGTAAAC TTGATTATTT TTTCATCATA GTAATTCGA CATTATCGTT 240

ATTTCTATTT AAAATGTTTG ATAGCGCGTC CTTAACATCATA TTAACATTCAT TTATTATTAT 300

AATGnATTTT GTCAAAATCA AATGGnATTC nATTTGTTG ATTATGGCTT CGCAGATTAT 360

45 CCATACTGGT GCCAACTACA TGGATATAGT TATATATGCA 400

(2) INFORMATION FOR SEQ ID NO: 2014:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2014:

TCTTTCGAGG ACAGTAGAGG GTCCACCCTA TTGGACGTGG TACTGTACTA CTTTTAAA

58

(2) INFORMATION FOR SEQ ID NO: 2015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2015:

TCTACCTGCA GGCATTCAAG CTTGGCACTT GCCGTCTTT TACAACGTCG TGACT

55

(2) INFORMATION FOR SEQ ID NO: 2016:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2016:

30 TACTCTTAAG CTAACAAACGG CGGTTATGAG TCCTTTGACA AGGTATCGGA GGAAAGACCG

60

TAAAGC

66

(2) INFORMATION FOR SEQ ID NO: 2017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 105 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2017:

45 CCAATAAGCA CACTGCCATT ATTGAGGACG GTACATnTAC GGTTAGACCC AATTGTTCAT

60

GGCGGTGGGC ACATAGTGTT TGGCTTGAG GAGGTTACCA TTGCC

105

(2) INFORMATION FOR SEQ ID NO: 2018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2018:

CCTTCCAATA GTAATTGATT GATGTATGAG TATATTAGGT GTGAAATCAA GAGGATTC

58

5 (2) INFORMATION FOR SEQ ID NO: 2019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2019:

TTTCCTCGTA GGTGGTTCTT CTTCATCTTC GTTGTGTTGT CCGAAGTTG GA

52

20 (2) INFORMATION FOR SEQ ID NO: 2020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2020:

30 ATAGTTTACGG TGAGGATGTT GGGTACGAC AGGAAGAAAG ACGGAAACAA

50

(2) INFORMATION FOR SEQ ID NO: 2021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2021:

TTGTCACAAT AATTCTTCA GGATCATAGG AAAATGATA ACGATTTTG AAGTATTGAC

60

45 TAATTGCTTC GCGAGTTCT AATAACCCTT TATGTGAGA GTATGATGTC TTGTCATTGT

120

TAATAGCATC AATATATGCC TTTTCACAA CATCAGGCAT CGGGAAGTCT GGTTGGCCAA

180

TAGTTAAATT AACACAATCA TCCAAATTAT TCATACGATT TGAAAATTGG CGATACTGG

240

50 GTGGCTCCTA AAATAATTAG GAAATGAGGA nTTnAAGGAA GGTTCCATT TnGTGGACAC

300

(2) INFORMATION FOR SEQ ID NO: 2022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs

55

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2022:

TCATCCAAAT TATTCTACAG ATTTGAAAAT TGGCGAATAC TTGGTGCTCT TAAATATTAA	60
GAATTAGAAT TTAAAGAAAG TTTCATTGT GACACCTCAA ATATAAATCA AATATTGTCT	120
AAAAATTAG AAATTAATAA TATCATAACA TACTTTAAA GCAAAAAAGG GTAAATTACT	180
TAAGCTTTAT TTGAAAAACG AAAATGTCT AAATACACTG TAGTAACCTAC TTTCAAAAT	240
GAATAAAGTG GTTACAGTTA ATGTACTTAG ACAGTATAAA ATTATGAATC TTTAAACTGT	300
GATGGTCTTT GTAAATTAAAT TATTGGATTG GTCCATTTAC AAACAAAGTT TGTAGATAAT	360
ACATATACGA TGATTACAGA TATACTTATT AAATAAAGAT	400

20

(2) INFORMATION FOR SEQ ID NO: 2023:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2023:

TTnAAATATA CCAATCACGT TCATCCACAG TGATCCTAGA CCAATCCAGA	50
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35

(2) INFORMATION FOR SEQ ID NO: 2024:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2024:

TTTTTAATGG TTTAAAATT CCCTAATAAA ATTTGGAAA ACCTAAATTC CAAGGGGTTA	60
AATTCC	66

45

(2) INFORMATION FOR SEQ ID NO: 2025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2025:

GTAAGAGCAA TGGCGAAAAA TGCCTGTAAT GATATTGTGA ACGTAATTGA ATCAGTAGAG 60

5 GACC 64

(2) INFORMATION FOR SEQ ID NO: 2026:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2026:
CTGTCGCTGC GTGACTTAAT TCTTTGCC CGTGGCATA TGAGGAAATG TCA 53

20 (2) INFORMATION FOR SEQ ID NO: 2027:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2027:
CATTTCACTA TTATTGGTTT AGGGTTGTTACGTTCATCA TGACCGCACCA 53

(2) INFORMATION FOR SEQ ID NO: 2028:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2028:
CAACTAGACA TAGTATTGCT GCATTAATCA AGTCAAGCTG CCACACTAAG AATCGATGCA 60
45 AACGGAATCG TCA 73

(2) INFORMATION FOR SEQ ID NO: 2029:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2029:

AATAATAATT CTGGAATAGT GTTTAATACT TATTnTCCGT TTAAGATTTC AACTTAATAT	60
5 GGGTTACAGC GCGTAGCTCG TCTAATTCAAT CATCACGTGT AGAGTGCTCT GCCTTATCAG	120
ATCAGTT	127

(2) INFORMATION FOR SEQ ID NO: 2030:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- 15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2030:

20 GCAAGTGAAT TGAAGTGACA TGTGGCTGGT GCTTCATGGT AATGATAAAC CAACACCAG	60
G	61

(2) INFORMATION FOR SEQ ID NO: 2031:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- 30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2031:

35 ATAAATATCT ATTTAGATAT AAGTATTGAT AAGTTGCTTG AATTTATAAA GTGAAGGGAGT	60
AGGTGTCATT AGTATAAGT	78

(2) INFORMATION FOR SEQ ID NO: 2032:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
- 45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2032:

50 GAATAGTGT TATAAAATGT TGACACTGTA GTGGCATATT GTAAATTAAA TATTATTATG	60
TGATCATT TT GTTTAAATAT TAGTTATAAG AAGTGAAATA nTCATTTAA AAGGAGACTT	120
AAAAACTTGAA ACGATCAACG AATCAAGAAA AATTCTTGA TACACTAATT AGACTTAATA	180

(2) INFORMATION FOR SEQ ID NO: 2033:

- 6 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2033:
 TTTTGTATC TGATAGGTA TGCAGCCGG TGTCTTATT CACTTGAAAC TGTGCGT

57

15 (2) INFORMATION FOR SEQ ID NO: 2034:

- 19 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2034:
 AAGGCATTGG ATATAAGACT TGATGTTGCA TGGCAATCAC ACTGCCTAAT CCTTGCATAT

60

AA

62

30 (2) INFORMATION FOR SEQ ID NO: 2035:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2035:
 ATGGCAAATA CTATACATCG TCCAATTGAT TGAAAAATAT GGTTATTAAA GA

52

45 (2) INFORMATION FOR SEQ ID NO: 2036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2036:
 AAGGTGTTT TATATGCTTA TTACAAATAC TTAACGCGAT GAGTTCTCA ACCAAATTGA

60

55

(2) INFORMATION FOR SEQ ID NO: 2037:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2037:

TACCCACCCC CAAACCCAAG GTTTTAAAAAA ACCCCTTCCA AAAGCCCGGA AAAACCAAAA	60
GGAATTATTT T	71

15 (2) INFORMATION FOR SEQ ID NO: 2038:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2038:

GAATCCCGGA AGTACAATTT GGTACGTGAA GAAAATGGTA GTGGAATTAC	50
--	----

30 (2) INFORMATION FOR SEQ ID NO: 2039:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2039:

CAGTATCTCT TGGTATTTTA ATTGGTGCTT TATTAACGT AATTTTACCT TTATATATCG	60
ATGGAGCGAA GAGTATTTTC GTATACGTTT ATAGTGCCTC TATTTTACCA GGTATGATT	120
CTTGGTTTAT GATTTTATTC AGTCATTTAC GTTTTAGAAA ATTACACCCT GAAGAATTGG	180
AAGGTCAACC ATTCAAAATG CCTGGTGGCG CAGTAACTAA CTATTTAACCA ATCTTATTCT	240
TAATATTAGT ATTGGTTGGT ATGGTATTTA ATGTTGAAAC TAGAATATCA GTGCTTATTG	300
GTGTCATCTT CTTAACGATT GTAACGATT ATTATTTAT TAGATATAAT AAAAnTAATG	360
TAAAGCAnAA TAGTATGTIA TAAnGAGCGn TACTTATGAC	400

55 (2) INFORMATION FOR SEQ ID NO: 2040:

- 5
- (A) LENGTH: 79 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2040:

10 AAGCTGATTT TTCTAAATGT TGAAAATCAT AAACGTCTTA ATAATAAAATA ACGAGATCTA 60
AGTAATAGTG CTCCATTAA 79

(2) INFORMATION FOR SEQ ID NO: 2041:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2041:

25 AATTGAACGG ATCGTTCCCA ACCGTTATCA ACCCAGACCG GTGTTTGAAC CCAA 54
(2) INFORMATION FOR SEQ ID NO: 2042:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2042:

AATGGGATTG GTTCAAACTG AAATGGGCTG TTAGTCCTG TAAAACCAAG 50

(2) INFORMATION FOR SEQ ID NO: 2043:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2043:

50 ATTGGnATAA TCAGAACATT GAATCATACA TAGTCACATT GATTGTTCC TCAGAGTTTC 60
AACACTCTAT AACTCATTTC AGTAATTGTC TGATTGCGCA CTTCATGTG 109

(2) INFORMATION FOR SEQ ID NO: 2044:

55

- 5
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: lin ar

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2044:

10 TTTTATGGAG GTGATGAAGT GGGTGAAGCT GAAAGGAAGC AAAAGCTTGG 50

(2) INFORMATION FOR SEQ ID NO: 2045:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2045:

TGGCCCCCT TCCAACCCCTT GGAAATTTA AAAGGCCAnT TTTGGGTAA AACCCCTTGGT 60

25 TCCAAGGACC CCCAAAAGTT TTTAACCTT CCAATTATTA T 101

(2) INFORMATION FOR SEQ ID NO: 2046:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2046:

ACCCCTTCCA AAAAGCCCAT TITGAATTCC CCAAAGGGAG CCAAATTTAA GATGGCCGCh 60

40 AAAAAGGACC GGGGGTCCA TGTTTTAATT TAAGCCGGAC 100

(2) INFORMATION FOR SEQ ID NO: 2047:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2047:

GTTAGTTATG AGCAACGTAT TAATGAAATT ATTGAGCAGT AATTnACCAG 50

(2) INFORMATION FOR SEQ ID NO: 2048:

55

- 5
- (A) LENGTH: 56 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2048:

10 TACGTATTTT CAAATGACGT TGGTGGACGT CACACTCCAT TCTTCTCAAA CTATCG 56

(2) INFORMATION FOR SEQ ID NO: 2049:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 82 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2049:

TTTTCCCCCC CCCCCCCAAA TTGGGGGTTA AAATTTAAA AAAAGGGGTT AAAGGGAAAC 60

25 CCCAATTCCG GTTAACCTTT TG 82

(2) INFORMATION FOR SEQ ID NO: 2050:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2050:

TCAGATGGAT GGCAGTTATT TGGTATTCCA TGGGTATAAA GATAGCATAT T 51

(2) INFORMATION FOR SEQ ID NO: 2051:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2051:

50 TGAACGGGAG AAAGATGTTG TTGCATGGTG TCTCGGAAAC GTTTGTGTCC ACGTA 55

(2) INFORMATION FOR SEQ ID NO: 2052:

- 55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 74 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2052:

ATACCTGGAT GCAAAGGCAA AGTCGCAATT TTCCCTGTTC TAATGTGTCT AACTTCTCTT 60
10 CTAAAGTTCA GGTT 74

(2) INFORMATION FOR SEQ ID NO: 2053:

15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2053:

AATCTTGTCT GATGTAATGT TCAGGTCCT TGACCCTCAT ATGCATGAGG T 51
25 (2) INFORMATION FOR SEQ ID NO: 2054:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2054:

CATCGACTTA TAGCTTAATT ATTATAAAAA ATTTCTCCAG ATTTAACCTT CT 52
40 (2) INFORMATION FOR SEQ ID NO: 2055:

45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2055:

ACTGACACAT TATATTAGTG AATTATTAAA AAATGATGAG AAAATTAAAA TCATCATGAA 60
55 TGAATTCGGT ACTTTGATA TTGATAGCAA TAGTATTCA AATGAAATTG AAGTCGATTC 120
60 ATTGATTAAT GGTTGTGTTT GTTGCATCT TAAACAAGAA CTTGTCTATG AACTAAAAGC 180
65 CATTGCTTTA AAAGGGGACG TTAATCATGT CATCATAGAA GCGACAGGCC TTGCGCATCC 240
70

TTATTTATGG TGTATTAGAT GCGACTCGAT TTTAGAACG TCATCAATAT ACCGAAAAAT 360
 ACAGTTTCGC TGGATGGGGA GGATCCAGTT GGAAACTAAn 400

5 (2) INFORMATION FOR SEQ ID NO: 2056:

- (i) SEQUENCE CHARACTERISTICS:
 10 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2056:

TCAAAACTTT GAAGTTGTGC TTGCTTTGCA CCATTTTAA AATGTTCAAGC TGAGAGTATA 60
 TCTTCCGCTG TAAAATTAC TTCTCCTGGA CTTAAAGATT CAATTAACAA CCAAGCCGAT 120
 AACGTATCAT TTAGCAATTG ACTCATGAAA TCCCACCTTG TTCCCTATTT GTTTTTTACT 180
 TAATGCTATT TTAACAAATA ATTTAATCAT ATTAGTGT TTTCAAAAT ATTCAATATAT 240
 25 TATCATTACC ATATTTATTC AACAAATGTT TGTAAAATCC TCACTAATAA AATTAATCGA 300
 TATGACCATA ATTCAATTAC CAATAAATGA CTATAAAAAT TTCTnCTATG CCTTCATTTG 360
 CAACTAAATT TGGACATCAA AAAAGAGGCAC TCCTGAATGA 400

30 (2) INFORMATION FOR SEQ ID NO: 2057:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2057:

TTGTTGTTGT GATTCACAT TTTCAAAATT TTGTTGCATG TTGTTAACCTT CATAAATTAG 60
 TGATTCGACT ACATCATTCA TGAGGACGCC TCCTACATTT TTTAATTAT CACAATATAC 120
 45 TGTATTGTC ATGTTTTAAC ACTCTATATA ATTTGATTAA ACTATTTTTT CAAATGTGTT 180
 ATCTGTTAAA TCAAGTAAAT CTAAAACCTT CCTATATAAA TACAAAATT TATCGTGTAT 240
 GTTGTATAC GATGAAAATA CTTTTAATCT AATAAAATCA TTTAAATCAA ATACACCTCT 300
 50 GCTGATTAAC AACACATACT TGTACTTGCC TCAAAAATAA AAATTACTAA TCATGATTG 360
 ACTTTTATAA CAAAATTCAA AAATATTGTA ATGAGTATTC 400

55 (2) INFORMATION FOR SEQ ID NO: 2058:

- 5
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2058:

10	TCTTTTACT CGCAATTTA GGAAAATGG TTGGATCAAT TGATAAAACC GGAAAATTAT	60
	TAACAATAAT CAATAAAATA TCAAGCATAA TAATTATTAT TGTTGCTCTG ATGATATTAC	120
15	AAAAACTTAT TCAATTATTA TTCTAAAGCG TTATGTAGTT GTATTTAAA AGCGTTATAC	180
	AAAAGACATA CTTGTGTCTA TGTATAACGC TTTATTTATT ATAAATTTGG ATCAATTAAC	240
20	TCAACAAATT TAAATGTTCC ATTGTATAT TCAAATTTCA GGATATTACA ATTACCGATA	300
	TTATGCTTTA ATGCTTCATC TAGTTTAAGG CAATATCTTA AAAATACCnC CCTTAnTGGT	360
	CCATGACTCA CGACTAATGC ATTATTCTTT GGTTTGAGAC	400

(2) INFORMATION FOR SEQ ID NO: 2059:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2059:

	AAAACAACAC AATCAAAAAT ATTGGATACA ACTGAAAAGT TATCAAAGCT A	51
35	(2) INFORMATION FOR SEQ ID NO: 2060:	

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2060:

	TTATCATGTT TAGTAGATT TAAGAAGCTA GAACATTGTA GATATGATGA	50
45	(2) INFORMATION FOR SEQ ID NO: 2061:	

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2061:

5 AACGTCGThA TATCAnCTTG CCAAACAAAG ATATTGTCAC CTTTTATCGG

50

(2) INFORMATION FOR SEQ ID NO: 2062:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2062:

ACCATGGTGN ATATGGTCAT GATGATCGTT TGTGCCGGGA GCTTGAGCTG

50

(2) INFORMATION FOR SEQ ID NO: 2063:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2063:

30 TTTCCCTTGG TTTTGGAAATT TAACCAAATT TGGGAGGGAT TTGGGACCAAC CCCCAGGATT

60

TTAAAAAAAAA AAAATCCCAG G

81

(2) INFORMATION FOR SEQ ID NO: 2064:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2064:

45 TTTTGGGGAC CTTAACTGGG TGGGTCTGGA ACTGTTTCCC TTTCAAACAC A

51

(2) INFORMATION FOR SEQ ID NO: 2065:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

55

ATGATGTATT CAAAAGGTAT CTATAAAATA GCTTTAGTTG GAAAAGATGA GA

52

(2) INFORMATION FOR SEQ ID NO: 2066:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 10 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2066:

TTTCATCACT GGCATCTTGT AATTTCCTGG TCTCATATCT GGAATTAATA GGT

53

(2) INFORMATION FOR SEQ ID NO: 2067:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2067:

AACCATTAAAG AAATTGGATA CACAGAGCAA ATATGGTTAT GATTAGGAAC CATGGCATT

60

30 ACC

63

(2) INFORMATION FOR SEQ ID NO: 2068:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2068:

AAAGGCAGCG ATGTTACTCA TACCGAACCT GGTTATATAT GAGCGATGAT GCAATGTA

58

45 (2) INFORMATION FOR SEQ ID NO: 2069:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2069:

AACAGGA**67**

(2) INFORMATION FOR SEQ ID NO: 2070:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2070:

15 CATTAAACCC ATCTTCTTTT TTTAATTCTT CTATACTACG GTTTAAAAAC TCTACAATAA 60
 CTGCCATITC ATCATCATCA AAGACT 86

(2) INFORMATION FOR SEQ ID NO: 2071:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 381 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2071:

30 GTTCCTTCAA AATATGTGTA TTACCTTTT GTATGGTAA ATCTTTTAAT TCTATCATTG 60
 TTGTCTTACC TCTTTGGTG TATCCTCTTT TTCAACATAT GTGATCGATA TGACATATTG 120
 CCCTTTATGC TTTATTTCGA CATACTTCT ACTAGGTGAA AATCCATTAA ATGTTAATT 180
 35 ATAATCAAGC TTTTCCCCTC TTTCACTATA AGCCGTAATA TTAACATAATT GTTGCCTTAC 240
 TTTTGGCACT TTGGCATAAC TATACTCCGT TTTTAAGAAA GGATTAAAAC GATCAAGTAT 300
 AGGATGATGT ATGANTGTAA AAGCAATAGT AATGGATAAT ATTAATCCTA ATAATATTGC 360
 40 AATGATAAAAT TTCATAGTTA A 381

(2) INFORMATION FOR SEQ ID NO: 2072:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2072:

55 ATCCCCGAAT TGCTTCGCAA ATGTATCATC TTGAGGCTA CGTTACTTAA AT 52

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2073:

CCAAAAACAG CATCACTGTG ATTATGGTTT TCATCTTCTA TAACTAAGAA TACATGTTTT	60
TTTGTAAAAA TTTTTTGAT CA	82

15 (2) INFORMATION FOR SEQ ID NO: 2074:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2074:

TTTATCGCAA TGAGGGAAGA TAAAGGATCC CGAAAGCGCC GTATGGGTTG GCAAACATTG	60
GGGACCAAGA CCGTTCCCCA TA	82

30 (2) INFORMATION FOR SEQ ID NO: 2075:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2075:

CTTGGITGCT CTTTATTTAT TTAATTGAGA CCTAGAAATA AGTTATTAAG CACAATCATT	60
CACTTT	66

45 (2) INFORMATION FOR SEQ ID NO: 2076:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2076:

(2) INFORMATION FOR SEQ ID NO: 2077:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2077:

 TACGTTCTAT CATAGAGCCT GGAGATGAAA TTATAATACC GGGACCAATT TATGCAGGCT 60

 ACATACCACT CATCGAAGTA CTAGGTGGTA AACCAATTAA TATTGATACA ACAGCAACAC 120

 AATTTAAAT TACACCTGAT GCATTAGAAA GTCATATTTC TCCAAAGACA AGAGCTGTCT 180

 TGTTAAATTA TCCGACTAAT CCAACTGGCG TAGTTTAAA AAGAAAtGAA GTTyTArATA 240

 TCGTAAATGT ATTAAAAAAA TATCCGTTAT TTATTATTAG CGATGAGATT TATGCTGAAA 300

 ATACATTTAG TGGTAAACAT GTATCC 326

(2) INFORMATION FOR SEQ ID NO: 2078:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2078:

 ACCCCTTAAT TTAATTGATG TTTTGTATT TTTAAATGA ATAGTTGAAG AAAAAT 56

(2) INFORMATION FOR SEQ ID NO: 2079:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2079:

 CACGTACTGC CATGTATGCA CAAGCCGGCA TTCATAAACG CTTCCATGGC AGTCGTTATC 60

50 A 61

 (2) INFORMATION FOR SEQ ID NO: 2080:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 94 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2080:

TGGGACAGGG CGTACCATTT CAAAATGATA GTTCTGAGCT GCTAATTAAAT ATGCCTTCGA 60

10 AAAAGATGAG TTTAAATTAA GATGATGAGA CTGA 94

(2) INFORMATION FOR SEQ ID NO: 2081:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2081:

AAGACGACAT GCAAGACATT GCCTTATCTA ATGACAATGT TAAAGCGAGT 50

25

(2) INFORMATION FOR SEQ ID NO: 2082:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2082:

35 TTGTTCGGCT AAAAATAAAAG TGGCATTGAC GTGACCGCAA GTTGACGTAC 50

(2) INFORMATION FOR SEQ ID NO: 2083:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2083:

CTTCCCAACA TTGCGCACTG AATGGCGATG GCGCTGATGC GTATTTCTCC TACGCTCTnG 60

50 CGTATTCAAC CGCTATGGGC ATCTCATACA TCTGTCGATG CGCTATTAAG CAGCCCGAAC 120

CGCACACCGT GAG 133

(2) INFORMATION FOR SEQ ID NO: 2084:

55

- 5
- (A) LENGTH: 57 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2084:

10 GGTAGGGGCA CTATTTGTA TGTAGAGGTT TTGTCGGGCA GTGTGAAATC AACGACT 57

(2) INFORMATION FOR SEQ ID NO: 2085:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 56 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2085:

CCCCCCCCCAA AAACCGCCCC CCCCAATTG GCCTTTTCC AAGGGGGGTG TTTTAA 56

25 (2) INFORMATION FOR SEQ ID NO: 2086:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 114 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2086:

35 AATAGCGAGA GCCCGACCAT CGCCTCCAGA TTGCGACTGA ATGGCAATGC GCTGATGCGT 60

ATTTCCTCTTA CCATCGTGGT ATTCAACGAT ATGGGCACTC TCATACAATn GCTC 114

(2) INFORMATION FOR SEQ ID NO: 2087:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 80 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2087:

50 AAGGGGGAAA AGGAACCCAA GGCCCCCTTC CCAAGGAAAT TGGGGGGTTG GAAAAAAACCA 60

AAAAATTTTT AAAAACCCGG 80

(2) INFORMATION FOR SEQ ID NO: 2088:

55

- 5
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: doubl
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2088:

10 GGGGTAAGTG GTTGAGACAG GAACTTACA AGAGGTGTTT CGTCATCCTA GAACGACGCT 60
 TGCTCA 66

(2) INFORMATION FOR SEQ ID NO: 2089:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2089:

25 ATCAATGTAT TACGTATCGA AGGTGAATTAA TATCATACTG CTAATATGAA CGGTTTCACA 60
 TC 62

(2) INFORMATION FOR SEQ ID NO: 2090:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2090:

40 GAATTCGCTA TCCTGAAATC CTGAGTCGCT GTCCCTGAAAT CTGAAATCGC 50
 (2) INFORMATION FOR SEQ ID NO: 2091:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2091:

CGGGGTTCCC CCGTTCAATT CCCTTTGAGT TTTCACACCTT GCGGGTCGTA ATTCCCCAGG 60
 CCGGAATTGC TTAA 74

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2092:

ATTGTTGGGT ACGGTGGTGG GTTAATAATC CAAACACGTT AAACTACCCG TTTTAGATAT	60
ACCTATACAA	70

15 (2) INFORMATION FOR SEQ ID NO: 2093:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 88 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2093:

GTTTGCGTC TTGGGTATTA GTTTAATCTC CATCATGGTT AATTGGTATG GTATTGGTAT	60
TAGTAATCAT GTATGATGGG CTGGGCAG	88

30 (2) INFORMATION FOR SEQ ID NO: 2094:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2094:

TGGCCATTGA GGCGCATTAC GTACTACGGC TTGTCGTAGG GACAATTATT AT	52
---	----

45 (2) INFORMATION FOR SEQ ID NO: 2095:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2095:

AGTTGATGCA ATGAGTGATG CAAGGCGACT GAAAAGTTGG TATGAATGAC AAAACTTTAA	60
---	----

(2) INFORMATION FOR SEQ ID NO: 2096:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2096:

ACTTAAAATC TAATACGGTA TTTTCAAAAA CGAATAAAAG TTACCTCTTG TCT

53

15 (2) INFORMATION FOR SEQ ID NO: 2097:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2097:

AACCTTAATAT TGCTACGATA TGAACGGCAT nAACATACTT AGCGnTGnTC

50

30 (2) INFORMATION FOR SEQ ID NO: 2098:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2098:

CAAAATAAGA AATTAATTAA GAAAATGCCA AGATGCCAGA TGCCATCGGC GGAAAGGAAA

60

45 TTGCACGTAC GG

72

50 (2) INFORMATION FOR SEQ ID NO: 2099:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2099:

CCACCCAAAC CCAAAAAATA AAGCCAAAAA AATTGCCAAG GAAGGAAAAG GAAAATTGTT

60

(2) INFORMATION FOR SEQ ID NO: 2100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2100:

CACCAATTTC TTCTGGnGCT GGATCTCGAC CTAAGTCCTG TAATAATTGA CGTTGAACAC	60
GAATTAATT ATTAAATTGTT TCTACCATAT GCACAGGGAT ACGAATCGTA CGTGCTTGGT	120
CAGCAATTGC ACGAGTGATT GCTTGTCTAA TCCACCATGT TGCAATATGTT GAAAACCTAA	180
ATCCTTTGTT AAAGTCAAAT TTTTCAAC	208

20

(2) INFORMATION FOR SEQ ID NO: 2101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2101:

TAATGAAATT AAGTAAAATA AAAATTATTT CATGGATTGC TTCTATCTAT ATCGAAATAT	60
TAAGAGGAAC ACCAATGTTA GTTCAAGTAT TTATCGTATT CTTGGTATA ACTGCTGCAT	120
TAGGACTAGA CATTTCAGCT CTTGTTGTG GAACAATTGC ATTAGTTATT AATTCCCTCAG	180
CTTACATTGC TGAAATTATT CGTGCAGGTA TAAATGCTGT TGATAAAGGC CAAATGGAAG	240
CCGCACGTAG TCTAGGTTTG AATTATAGAC AAACGATGAA AAGTGTAAATT ATGCCACAAG	300
CAATTAAAAA TATTTTACCA GCTTTAGGTA ATGAATTGT CACTTTAATT AAAGAATCAT	360
CTATTGTGTC AACAAATTGGA GTTGGCGAAA TTATGTTAA	400

45

(2) INFORMATION FOR SEQ ID NO: 2102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2102:

55

(2) INFORMATION FOR SEQ ID NO: 2103:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2103:

TTTAAGGAGA AAGGTCAATTG GTATAATCTT GAGAAAGAGT GGCAAGAGTT CTTAAACTCT	60
GGGAAAGAGG TGAAAATAT TAAAATGGAA GTAAAATATA GCGGTAATAG TCAAAGACCG	120
ACTATATTAA AAGTTGAATA TGAAATTAAT GGTGAAAGAA ATATTAGAAG AATATTAAAT	180
AAGTAGAGGT GCCAACATGA CATTGAAAGA GAAGCTTAGC AAAATATACA ATGAAATTGC	240
GAATGAGATT AGCAGTATGA TACCGGTAGA GTGGGAAAAA GTATATACAA TGGCTTATAT	300
AGATGATGGA GGAGGTGAAG TATTCTnTAA TTACTACTAAA CCAGGnAGTG ATGACTTGAA	360
TTATTACACC AATATACCTA AGGGTATAAC ATTCCGGTGC	400

25 (2) INFORMATION FOR SEQ ID NO: 2104:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2104:

AACCATCATA AAATGTTATT AAACCGTCAT GGACCGCGTC ACCATTTAGT CCT	53
--	----

40 (2) INFORMATION FOR SEQ ID NO: 2105:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2105:

AAGCACAAAT TAGCAGAGTG TTTTAATTAA AATGAACAAG TACCTTTACA ATTTTGGA	60
AATGTAAAAG TTGGTAAAAA TAATATTAT GnTGCTTGG AAGAGTTGC CAACAA	116

55 (2) INFORMATION FOR SEQ ID NO: 2106:

- 5
- (A) LENGTH: 61 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2106:

10 AATTTGCAAA AGAACATGG ACAATTGAAA GCAAAAAGGA TCATCATCAA AATTGAAC 60
C 61

(2) INFORMATION FOR SEQ ID NO: 2107:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2107:

25 GAACCAATGT TAAGCTAATT AATGGAATCC TAACAGCGTT AATCTATTAA AAAAACTTAA 60
(2) INFORMATION FOR SEQ ID NO: 2108:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2108:

ATTTGAAAT GAATCTGTGG AACATTTGC TAATCATGAG GATAAAATCA TATGATGTTG 60
40 AAAGCGAGAA TGGGATTACG TTAAACGTGG GCGCTGCTAA TTTAAGCACC TTATTTAGTG 120
GAAGAT 126

(2) INFORMATION FOR SEQ ID NO: 2109:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2109:

55 ATAATGTTAA AAAAACGGCA ACTAATCTTT TCATACTAAC AATGATTATA TGTACAATAA 60

CGTTAATAAT GCTAGATAAT TTTAAAAAAA TGAAAACCG TGAATATCAA AAAGAAATAG 180
 5 CAGAAAAAAA TAGACATATT AATACATTAA TTGCTGAACA AGAGCGACAT AGAATTGGTC 240
 AAGACTTACA TGATACGTTA GGGCATGTGT TTGCAAGTTT ATCATTAAAA TCAGAATTAG 300
 CTTATAAACT AATAGATGCT GATGTAGAAGA AAGTAAAAGC TGAATTATTA GCAATTAATA 360
 10 AATTATCTCG TGAATCATTG TACAAAAGTC GAGAAATTAG 400

(2) INFORMATION FOR SEQ ID NO: 2110:

- (i) SEQUENCE CHARACTERISTICS:
 15 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2110:

AAGATTTAAT ATCGGGGTA ATGTTGATT TCAAATATCG CGATGTGCTT GTACCACCAT 60
 25 T 61

(2) INFORMATION FOR SEQ ID NO: 2111:

- (i) SEQUENCE CHARACTERISTICS:
 30 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2111:

TATACTAAAT TATGGCAACT TGGCTCATAT AGGTGAGTT ACCAGACATA TTCGG 55

40 (2) INFORMATION FOR SEQ ID NO: 2112:

- (i) SEQUENCE CHARACTERISTICS:
 45 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2112:

CGAATAAGTT CTGGGCCTTT TGTGTTCAT TAGCTTGTTT CTGTTTGAT TGTTCTGCCA 60
 TTTGAACTAC ACCAACCTTT TAAATTTATT CTAGTGACAG GATAACTAAA ATATATTTCT 120
 55 TATGCAATAA TTTCCTATTG ATAAGCATT TCAGATTTA GTTGTAAATT TTGCCCTAAT 180

AATTTATAAA GAATAAATTG GTCTCCTCTT TGACCTATAA TATATTGAnC ATTATAAGCC 300
 ATGCGATTCA TTCCAGACAC AGCCATAAAC TCTTGTTTAT CTATCATTTT AAATACCATT 360
 5 TTTAATTGGG CTTAATGGGA CATTCCGTAT TAAATCATT 400

(2) INFORMATION FOR SEQ ID NO: 2113:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 87 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2113:

TGTTTTCAAA GCATGGTATA AATGCTTGT AACATAGGTT TTGCCTACAT CAGTATTGCT 60
 20 ACTTGTAATA AAAATCCTCA TAAAAAT 87

(2) INFORMATION FOR SEQ ID NO: 2114:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2114:

TTTACAAGTT AAATATAAnCA CTAaaaATTT TTAAGTCAAT AAGAATATAT 50

35 (2) INFORMATION FOR SEQ ID NO: 2115:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2115:

TGTGCATAAA ATCCTTTAC TTTTGTAAT TGATTGTTAT CTTAACAAAT TA 52

(2) INFORMATION FOR SEQ ID NO: 2116:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2116:

5 ATTTAnAACC CAATTCCCCA TTATTTTTA AAACGGATT CATGGGTGGA CCATTGGAAA 60
 TTTTAAAAAA ACCATGGCCC CATTCCAAA AGTTAGGATG GCCAAAAAGC CTT 113

(2) INFORMATION FOR SEQ ID NO: 2117:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 93 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2117:

20 GATTTATCAA CTATTTCCGT ATTTTGATTA TCTCCATACA ATTTCCAATC CTCTGGCTTA 60
 TCAATAAATA ATGATAATGG CTTATCTTC GAT 93

(2) INFORMATION FOR SEQ ID NO: 2118:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2118:

TGATTACCTT GA_nACATGAC TTTnCCTGAn TGGTAAATAT TTACAGTTGT 50

35 (2) INFORMATION FOR SEQ ID NO: 2119:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 217 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2119:

AGATATAAAA TATAAAAAT TATTAAGC TATATCCAAT CAAGACTTTA AAGGGTTAGT 60
 TCCAAATATC AATCAGAATG ATAATTATnC TGAAATATAT ATAATTAACA ATACTAAAAA 120
 50 CTTAATATAT CATTATATG ATGATAGAGG TCTATGGCTA GCTTTTAATA ATAATGAAGA 180
 TTATGCAAGA TATnCTGAAA AATATAATGA TTTAATA 217

55 (2) INFORMATION FOR SEQ ID NO: 2120:

- (A) LENGTH: 75 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2120:

10 AGACTTAGTA AAGTTAGATC ATCTAAAGAT GAGCGTAAAAA TTTATATTAA TTTAAATAAT 60
GGATGATATA TCTAA 75

(2) INFORMATION FOR SEQ ID NO: 2121:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 87 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2121:

25 CACCACCTAC ATTTACTATA TAAAATGTAG GAATGGTAGA TTGATTTAGA TAAACTGGAC 60
GTATCACTTT AAGTGCCTTT TCAAAGA 87

(2) INFORMATION FOR SEQ ID NO: 2122:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 70 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(iii) SEQUENCE DESCRIPTION: SEQ ID NO: 3122:

40 TGGTCTTTAG CTAAAGCTTT AGCTTCTTCA TCACCTTTAA CTTCATAAAAA ATCTACACCA 60
GTCAGCTTCTTCA 70

(2) INFORMATION FOR SEQ ID NO: 2123:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

ITEM 11 - SURVEY DESCRIPTION - SFC ID NO: 3123

55 TAnATCTAAA AGGAGAAAATG CTGAAGATGA GAGAGGTATT TTTGAAATGT 50

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: doubl
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2124:

TTAAAGGGTA ATTGTTTAA AAAAAGATTA AACCGAGGAC TTTTAATTGT TAAAACCATC	60
CCT	63

15 (2) INFORMATION FOR SEQ ID NO: 2125:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2125:

TGTAAACGAC TATTACATGA TCACAATCCA TTCAGCGCCA TTATATAAAG GTACTTAATA	60
TAGGACATCA TTCGCAGC	78

30 (2) INFORMATION FOR SEQ ID NO: 2126:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2126:

TTGGTCGTG TGCAAGACAG AAGTCGACAT ACTCCAATGA AACATCATGT	50
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45 (2) INFORMATION FOR SEQ ID NO: 2127:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2127:

TTTGTGTCGA TGCGCTTTT CACTTCTCT GAATGCTCGA AATCATTCTG	50
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- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2128:

TGTCTGAAAT GATCATTAGG ATTGCTCCAG CTCAATGTCA GTnGnAATGA

50

- (2) INFORMATION FOR SEQ ID NO: 2129:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2129:

TCCATTACCACTACAAAGTGA GTGCTTTCTT GACCAAGTCA AAACGAACTT TTATATTGT

60

CCAAAC

65

- (2) INFORMATION FOR SEQ ID NO: 2130:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2130:

TTCCAAGGTG TCGCTGACTT TCAACACACT GAATATATAAC CTGCCAGTCG GCTGGTCATG

60

6

61

- (2) INFORMATION FOR SEQ ID NO: 2131:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 92 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2131:

AGTCTTCAG TCCAAATGCG GCATGTGAC CCACCATAGG CGAGGGCATT TTCACCACGG

60

55

(2) INFORMATION FOR SEQ ID NO: 2132:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2132:

CCCCTCGAGT TTTTTTTTTT TTTTTTTTTA CTGGAGCAAA ATGAATTTTT TTTATTGTAC	60
TTCAGGGCAA CAAGTCAACA GCTGCAGGAA AACAAAACCA GGTCCAATCT ATGATCTAAG	120
AGGAAGTCAG GAAAGGCTTG GAAGAGAGAT CCAAAGGCCA TCCTGGCAAG GGGAACTCCA	180
CATGAGAATT CCTGGGAGAG AGCAGGCCCC AGGCAGCAAG GTCATCTTGC CTGCTTCTCT	240
GTAAGTTAAC CCTTCACAGG GAGCCAAGGC TTCTCTTGAC TGCTTGGACA AGAGGGTAAG	300
GGCCCTGGTT GCAGGATTTG CCAGTGAAGT CATCCATGTC AATAGACCAG ATCATGGCTC	360
CTCCCAGGTT AAATTCTTA AGAACTGAAC CTTGnCTCCA	400

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25

(2) INFORMATION FOR SEQ ID NO: 2133:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2133:

TTCATCATAC AACATTACAC TTTGTATGAC TAAACCCAAA TTAACGATAT	50
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40

(2) INFORMATION FOR SEQ ID NO: 2134:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2134:

GTGGCAAGCT TTTTTAAGGT CTGACTGCCA TCGACGGATC TATGTTAACCA GGTGGATCT	59
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50

(2) INFORMATION FOR SEQ ID NO: 2135:

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- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2135:

ATCAAAGTCA TCTnCATGGT CnATCACACC ACGCTTTATA TGGAATTCT

50

10 (2) INFORMATION FOR SEQ ID NO: 2136:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2136:

20

CGGGATCTGA GGTCGCTATC TGCAATCTGC AATCGCTATC TGCAATCTGG AG

52

(2) INFORMATION FOR SEQ ID NO: 2137:

25

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2137:

nCTCAACCAAC CCACACAACA ACACAACAAG CAGCACCCAC ACACCACACA

50

35

(2) INFORMATION FOR SEQ ID NO: 2138:

40

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 87 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2138:

TGTATTGTCA TTGTAGACGT GTGTAGCCAA ATCATAAGGG CATGTGATTT ACGCATCCAC

60

CTTCTCGGTT TGTACCGCAG TACTTAG

67

50

(2) INFORMATION FOR SEQ ID NO: 2139:

55

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2139:

TTCACCGTTG CGAACGTT AAGTTGAAG TTCGTTGGC ATGTTGAAAT AAGCACCAGT 60
TACACCAAAA CGCCCCAG 77

(2) INFORMATION FOR SEQ ID NO: 2140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 148 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2140:

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ATCTTCTAAC ATTCACTTAG TAGCGTnATT TTTCGCTTAT AATGAAATGT TAAGCATATG      60
CGGGATTAT ATTTTAAAGA GACCTTTAGA TACCATATAT ACCTAGGTTA TTGAAAATAT      120
GGATACCCITA TATAAGTGAT TTGCAATA      148

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(2) INFORMATION FOR SEQ ID NO: 2141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2141:

GCTGGCACAT AGATGATCGT CAAGTCGATC TCGCCAGTCT GAAGTCAAGA 50

(2) INFORMATION FOR SEQ ID NO: 2142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2142:

TTGTGTAAA TACTATCACT GTACATGGGT GCTATCAAAA TATTGTCAGT TCGTAAAATA 60

50 (2) INFORMATION FOR SEQ ID NO: 2143:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 135 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2143:

GTAGTATATC TTATTAATTG TATCATGAAG CAATTTAAAT ATCATGACAA TTTAGTTGA	60
AAAACACACT TTGTGTTGAC GTTGTGTTT ATGGGATATA GnATAGTAAG GAATGTAAAA	120
TGAAGGAGTG AATGC	135

10

(2) INFORMATION FOR SEQ ID NO: 2144:

15

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 57 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2144:

TTTTAAGGTT TGAAGAAAAA AAGTTTTAAA AATTCAAGGA AACATTTAAAT TAATTAA	57
(2) INFORMATION FOR SEQ ID NO: 2145:	

25

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 148 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2145:

TTTCGAAAGT TTGATAGTCC ACCTTACATT CTCCTACTAT TTTCTGATGT CCCAATACTT	60
TATATTATTT AAAGTAATAT AAAAGCAATC TCTTTGAAG ACATGTTAAC CTAAATATTT	120
TTATATATAA TATATATATA AAATATAn	148

40

(2) INFORMATION FOR SEQ ID NO: 2146:

45

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2146:

GTAAATACAA TACGGTTAAC AGCACCTTTA CGnTAGTTGC TTTnCTGCAAn	50

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2147:

AATCCCCTCT TTTCTCTATT TCCTAAATCA TAGAACCTTT AACAGTAAAA TTCAATCATT	60
AATAACATG	68

15 (2) INFORMATION FOR SEQ ID NO: 2148:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 92 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2148:

AGGTCCATTT GTAATTATA ATGTTGACTA ATAACATCTA CAGAATTAA CGTTCCCATA	60
CCTCGCCACT GATTGTAAT AAACAAACCA TA	92

30 (2) INFORMATION FOR SEQ ID NO: 2149:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2149:

ACCATCCATT AAATCAGGAT CTTCACTAAT AAGTGCTAAA TTAGCAGCGC CACGTTAAC	60
GTAATCCAT	69

45 (2) INFORMATION FOR SEQ ID NO: 2150:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2150:

TCAAAATATA TACGATCACC	TTTCTGTAAA ATCACACTAT	TTTTATTTCGC CGCTTCTGGA	120
TGTTGTTAA AAAATTGTTG	GCCAACTTCA CCTTTAACG	TGGCAAATTG ATAATTCTT	180
5 GGTAGGTCAT GTTGAATTAA	CCAAATGACA TAGTTATAAC	AATATATACCA GTTTCCATCA	240
TAATATACGA TTGGCATAAT	TTATTCGCTC CTTTAATAGT	ACTTATAGTC ATTTTCCTA	300
10 ATTTAAAAAC ATTTAACAA	GGTTGTCACT TGATAAGTCC	TCGCGACACG AAATTGCCAT	360
AAAATTATT TTTCAGnTTn	ATAT		384

(2) INFORMATION FOR SEQ ID NO: 2151:

- 15 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 83 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2151:

TGTTGTTAT CACTATATTT	AAAAAATAGT CTATAAGGCT TATCAGATGA AGTAGCTGCT	60
25 GGCCTAACAC CACCAAGTAAA TGT		83

25 (2) INFORMATION FOR SEQ ID NO: 2152:

- 30 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2152:

GTATTCGTAC ATTTTCAGC	AATTAACCAA GATGGTTACA AATCATTAGA AGAAGGTCAA	60
40 GCTGTTGAGT TTA		73

40 (2) INFORMATION FOR SEQ ID NO: 2153:

- 45 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2153:

CCCCCCTCCC CCCTCCCCnC	CCCCCCCCCC GCCCCCCCCC	50
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- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2154:

TATTTTAGGC TTAGCATTGA TGATGTTGCT CATTTCAT ATATAGGAA TTATT 55

(2) INFORMATION FOR SEQ ID NO: 2155:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2155:

ATGCTTGCTG ATATAATGTA ATAGCGTCGT GATAACGTTG CTGGCTTATA ATATACATT 60

GCGAGATT 68

(2) INFORMATION FOR SEQ ID NO: 2156:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2156:

TAATCTTGT CGTCGAAATA CAAACTAATC TTTGAGTTA ATGATGAAGG TACGCATTGT 60

40 GTATCACT 68

(2) INFORMATION FOR SEQ ID NO: 2157:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2157:

TCATTCATTT TCCTCTTTTC TTTTATTTAA AATGTTCATG GTTGTTCCTC TTAATTCTGT 60

55

AGATGCTAAA TGGTCAAATT GAATAATTGT TTCTAGACTC ATITCATAAA TTTCGAAAAA 180
 TAATTCTTCG GGATTACGTT TTTGTATTC TCCAAATGTT TCATAAAAGCA AATCAATTTT 240
 5 ATCAGCAACT GAAAGTATTG GCCCTTCTAA TGAATCATCT TTACCTTCTT GCAGTCGTTG 300
 CTTATAAACCA TCTCTATATT GTAATGGAAT TTCTTCTTCA ATAAAGGTCT CTACCATTTC 360
 10 TTCTTCAACT TGCGAAAATA ATTTTnnTAA TTCACTACTC 400

(2) INFORMATION FOR SEQ ID NO: 2158:

- (i) SEQUENCE CHARACTERISTICS:
 15 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2158:

TATTTTTTTC TTCTAGGCAG TGTTAATACT GCTTCAATT GTTTTTTACT AAAATTGATAT 60
 TTCTCTATGA TTGAATTAAT CAATTGATTG TCCATTTACT TAACCCACAC TTTTTCTTAA 120
 25 ATTTACTCAT TTATTTTAAC ATATTCTAAA ATACTTCTAT TAAGATATGA TACTTAATGT 180
 AATTTTCACT TCCAAAACAT TTAAAACGAA TGATTAGGnC ATACTATATT nT 232

30 (2) INFORMATION FOR SEQ ID NO: 2159:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2159:

40 CCGTTTTTCC AAAAACTTGA TCATAAACCC GCTCCTTTT TCATCATAAC AAAATAAGAA 60

(2) INFORMATION FOR SEQ ID NO: 2160:

- (i) SEQUENCE CHARACTERISTICS:
 45 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2160:

CGATTTACTG CACGACACAT TGCCACATCC TGGATGGCA ATCTTTCTC TTACCCGTCT 60

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2161:

ATTAGTTGAA	GTTTTGAGC	AATTGAAAGA	TATTCAGGGT	CAAATAAAA	CGACAAAAAA	60
AGAATATCAA	CAGACCAACA	AAGAACTTTC	TGCTGTAGAT	AAAGAAATT	GAAATATAGA	120
AAAAGACCTC	ATGATACAA	AAAAAGCACA	AAATGAATAC	GAAGAGAAAT	TGTATCAAGC	180
ATATCGATAT	ACCGAAAAAA	TGAAAACACG	TATTGATAGT	TTGGCAACGC	AAGAGGAAGA	240
ATATACTTAT	TTTTCAATG	GCGTCAAACA	TATTTGAAA	GCTAAAATA	AAGAATTAAA	300
GGGTATTAT	GGTGCAGTTG	CGGAAATTAT	TGATGTGCCA	TCTAAATTAA	CTCAGGCAAT	360
TGAAAACAGCA	TTAGGTGCTT	CATTACnACA	TGTCATTGnA			400

(2) INFORMATION FOR SEQ ID NO: 2162:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2162:

35 GTGCGTACCA TTGTAATCTT CGTAAACTGG GTAATTATTT TGTCTTCTT CATCATAAAG 60
TAATAAA 66

(2) INFORMATION FOR SEO ID NO: 2163:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 72 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3163:

50 AGAATGGTAA CATGGTAATA ATAAAATATA AACAGAATAC TAGTTAACAC ACTTTATACT 60
51 AGAATGGTAA CATGGTAATA ATAAAATATA AACAGAATAC TAGTTAACAC ACTTTATACT 72

(a) INFORMATION FOR SEQ ID NO: 3164:

- 5
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2164:

10	CGATAATCTG TTTTTTAAA TCTGTTGCTG TTAGATTAG CACCGATTG TTTAACTTC	60
	AATAATTGGT ATTACCTTG GAAGAAAGTG GAACTATTGT AACTGTTCT TTTCCCTTAT	120
	TGTCTTGTGTT ATCTAATATT ACACAAAAAT GATTACCAAGA AAACCTCACTT CCAATATTAC	180
15	TCCCTAGTTT TACATATACC ACTGTTCTC TACnATATGA TTTATAATAT CTTTnTTTAT	240
	TGCTTGTAAC ATCGCTATGT ATAGCAATTG GAATAAAACT CTAGCCAATG AGGCATGThT	300
	ATAACTTCA TGTTTTACT GTCGG	325

20 (2) INFORMATION FOR SEQ ID NO: 2165:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 121 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2165:

	TAAACCCCTT TTGGGTAAAA AAGTTTGGGA AAATTCCCCC GGGGGGAAAG GCCCCCCAAA	60
	AATTGTGCCCTT CTCCnCGGGG GAAAATTAAA ATTTCCCCCCC TTTTAAAAGG GTTTCCCCTT	120
35	T	121

45 (2) INFORMATION FOR SEQ ID NO: 2166:

- 40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2166:

	CGGACAGTTA AATGAACGT TCAATGAGCC CAGGATGTTG TAAATGGTTC GG	52
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50 (2) INFORMATION FOR SEQ ID NO: 2167:

- 55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2167:

ATTACAGTAA AAAATGGATT AACATTACAA GCGTGCTTG CTAGAGCAGC CAA

53

(2) INFORMATION FOR SEQ ID NO: 2168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2168:

AAAGATTATT TATTTGCAGT CATTAATTGT GATTTAACAC GGTCAGCTTT GTTTGAATGT

60

ATTAAATTAC nTTGAGCAGC TTGTCTACT AACCTAAC TG CTAAGCTTAC TAAT

114

20 (2) INFORMATION FOR SEQ ID NO: 2169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2169:

AAGGAACCCC CCCCCCTTAA AATTTTTGGT GGTTTTAAAA AATTCCTTTG GATTTATTAC

60

CTTTATTCCCT ATnATTTCCG GTTTGGATTTC TCCTGGATTA AATTTCCCCA TTAAGCCATT

120

35 TCCGCTTCCC TTATTTTATn ATTTTCCAAA ATTTCCAAG GTTCCATTIG GGATTTGGC

180

AATCCCTTTT TATTAATG GCCTAAAAAT TTTTT

215

(2) INFORMATION FOR SEQ ID NO: 2170:

40 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2170:

50 TATCGTTTTT AGAAATGGAT GTTCTCTCCA AAGATGATGG TATCTAACAT TATCTTATTG

60

GTATCATTAT GCAACChTTA CAAAACATTG ACGCAAGATG ATACATTATC CAAC

114

- 5 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2171:

10 ATCACAGATG AGATAACAGA TCCACTGTAA CTTTACAATA AATAAATGGT ATCATAATTA

60

ACACGTAAAT GGTTC

76

15 (2) INFORMATION FOR SEQ ID NO: 2172:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2172:

25 ATTATCACAA AATGTTGACA CGCAAAAAGT TGGTCAGTTA TCAATATGGT ATATAAATCT

60

GAGA

64

(2) INFORMATION FOR SEQ ID NO: 2173:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2173:

40 AAAGGCCAAC CAACCAAAGG CCAAAATTAA CCGGCCAATT CCAAGGGGTT AATTAAACCC

60

G

61

(2) INFORMATION FOR SEQ ID NO: 2174:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2174:

55

5	CACCCCGCAC TCTCCCATCT TTTACCTACT GGCTTCTTG CATTGCCCTG GCACCTCCGT	120
	CCTCAGCCTC CCAGGCTGTA TTCATTCAATT CCCTTACTGA GCACGCACCA TACACCAAGC	180
	ACCATTCAAG GTGAACCAAGT CAAATGAAGG CCTGGCTCAT TTAAATGGGG GACAATGAGC	240
10	ATTTTGTCA CAATTTCATG GAGTGATGAG TGCTGTGAAG AACTAACAG GTCAGGTGTA	300
	AGTGGCTCAT GCCTGTAATC TCAGCACTTT GGGAnGCCGA AGCAAGTGGA TCATTTAAGC	360
	CCAAGAGTCA AGACCAGCCT GGGGnnACAT AGTGAGAnTC	400

(2) INFORMATION FOR SEQ ID NO: 2175:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2175:	
25	ATATCGTTA AACCATCAAC AAGATTTAT AGATGCAACT TTTACTGCGC TGAAATCAGA	60
	TAGAGCACGT TTAAAAGAAG TGCCAGTTCA TGTTGAACCT ATAAGTTATA TTTCTAAATC	120
	AAAATAAAACT GCTATCTAAA ACGCAAAGTT GATCAAATAA TCGATTTGT GTTTTTATT	180
30	GAGAAATTAT ATAGGAGTGT CAATCGATGA TTATTTGTGA ACAGAGCGTT TAATATTAAG	240
	AGACTGGCAT GAAGATGATC TGTTACCTTT TCAAAAAATG AATGCGAATT ATGACGTACG	300
	TAAATATTTT CCAAGTTAT TGAGTTAnCG nCGTTCAGAA TTAGATATGA GACCTATGGA	360
35	TGCGGTTATn AAAGATTATG GCCATTGGGA TTATGCCnG	400

(2) INFORMATION FOR SEQ ID NO: 2176:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2176:	
	TAAATCAAGG AAAGACATTT TAAGGTACGA AGGTTGATAA CAAAAAACCA ACAGATTTAG	60
50	GGGTATCAGA G	71

(2) INFORMATION FOR SEQ ID NO: 2177:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2177:

GTTGAATTAG GCAGCACGAT TATTGATGCT GAACTGTTAG AGTCAGATAA G

51

10 (2) INFORMATION FOR SEQ ID NO: 2178:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2178:

TTAATTAAATG GTATTTACAT ATTCTATAACC AAAGGATAAA ATAATTGTGA AATTATTAC

60

A

61

25 (2) INFORMATION FOR SEQ ID NO: 2179:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2179:

CATTTTACCA TGCAGCAAAT AATACAGGTG GTGCCGTTAA CAAACGTGAn

50

(2) INFORMATION FOR SEQ ID NO: 2180:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 40 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2180:

GCCGAACGAA TCAAATACCA TACCTAATTG ACTGCAGGCA TGTCCATATA GTGCAGTTAA

60

50 CTGTCTACAA GGC

73

(2) INFORMATION FOR SEQ ID NO: 2181:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2181:
 TACTTTGGC GATATCGGT ATCGTTATTAA CAGTTATTT ATATGCAATT AAATTGCCGG 60
 10 GTTCTATCTT TATCGGTATG ATCATCACAG CAATCGTTGG TATGTTCACT GGATTGATTC 120
 AAATGCCATC TGGTATTGTG GGTAAGATTCA CAAGTATTGA ACCAACGTTCA GTGCTGCAT 180
 TTGAAGCGTT TAAAGACCCA AGTCATTAT TAACGATACA GTTCTTAATT GTTATTTAA 240
 15 CGTTCTTATT TATTGATTTC TTGATACAG CTGGAACATT AGAAGCGGTT GCAnCnCAnG 300
 C

(2) INFORMATION FOR SEQ ID NO: 2182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2182:

30 TTGATTCGCC TTGGCCAGAA TTACTTTGT TTTGGGCGTC ATTCCAAGTT TCTA 54

(2) INFORMATION FOR SEQ ID NO: 2183:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

45	TTAGTnACAT TGGGACATTT AACTGATCCA CCAGTACTTT TGGCGATATT CGGTATCGTT	60
	ATTACGTTAT TATTGCATAA TGCGGTCACT ACGAGACACC GCACTGAGTC CGATATCA	118

(2) INFORMATION FOR SEQ ID NO: 2184:

50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

AGATAGTTAT ATAAAGATTT CATCTTCGT ATTACATTGA TATTTTCTAGG TCCCTGTATA 60
 5 TAAAAATCAT ATGCCTCATC AACAAACATCA CTTTTATTT TGATTGCAAT TTGATGTAAT 120
 ATCTTTGAC TAAAACACG ATTAATCATA TTTCTATTAT CCATAGCTAC GCACCTCCCT 180
 10 CAACATACAT TTAATGCTTA TCCTGTTAAT ATTATAAnCn ATTTTAAATG CCTATAGACA 240
 TTATTTCTAT ACACATACGA TTATnAAATT GTATTGAAAC CAAATGATGG TTGCCAAACA 300
 CAT 303

(2) INFORMATION FOR SEQ ID NO: 2185:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2185:
 25 CGGGGGTTTT GGTTAAACCC TCCCAAAnATT TTTTTTAAGC CCAAACCTTG GAAAAACCCA 60
 GCCCACCCGT TGGAATTTTT AAGCCTTGGA TTAATCCGGT TTGGTTAAC 110

(2) INFORMATION FOR SEQ ID NO: 2186:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2186:
 40 CCTATATTGT CACCCAACTT CATTACGGCA CCTTTACCGA AAGATTTCTC CATATTTTA 60
 ATTACTGTAT CTAAAGCTTT TTGACG 86

(2) INFORMATION FOR SEQ ID NO: 2187:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2187:
 55 TTTGCTAGAA AACATACCAAC ATTTGCCAAT TATATTATTT ATTCTGATGT TTATTTCGG 60

TATTTAGAGG TGATAAAATT TGTCAACTAT TACAAAGACT AAAATAAAA TCTTTATTAA	180
TTATTTTATT GGTATATTAG CCTTGGCGTT TGCTGCTTAT ATATTATTAA AATAAAGGTT	240
5 AGAGTGAAAC GTGTTTATGA ACTAGACGTT CTAGTATAGT TACTACAGCT TTAGTCAGAA	300
GGTATCATTG ATAAGATCAT ATTAAATCAA AGAGGCATTG ATATACACTA AAAAGAGGCA	360
AGATTACCTG CCTCTTTTA GTnATTAAAT ATACGTGTTA	400

(2) INFORMATION FOR SEQ ID NO: 2188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 131 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2188:

TTTTATAAAA TATCAGACAT TTTTGnTCAA CATACTCTC TTTCGATGTT TCTAATACCTT	60
TATCATTAAAC CATTACACCT TAAAGTTATG ATGTGGCATG TTTTCTTATA TTCATAACAT	120
25 CAATTTTATC A	131

(2) INFORMATION FOR SEQ ID NO: 2189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 85 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2189:

CGTAAAATAT TTTGATTAA AATGGAGGGT ATTAATATGA AAAGGTTCAT GTAAAATCTA	60
40 GGGGTATTCC AATATTATAA GGCAC	85

(2) INFORMATION FOR SEQ ID NO: 2190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 224 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2190:

CCCGAGGAAT ACATGGCATT AAATACACGT TTAATATTAA TAAAGGTGAC TTAATTTTGT	60
---	----

ATAATTGTTT ATCACTGATA AAATATTGTC AATAAGAAGA GAATGACTAA ATAATCTTAA 180
 TTTTCAGAnA AGTAATTGTA ACCTTACTGG TCTTATGGTA ATAn 224

5 (2) INFORMATION FOR SEQ ID NO: 2191:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2191:

AGCTTTGTA GTTTCTTAA GCACACCGGC GATTGATTA TTACATAAAG GATTCCCTTT 60
 TTTTGTGTA AATATGAACC CTCTGTCAAC ATAGCTGAA TTCCATCTTT TCAACATTTT 120
 20 GTTTTCCAGT ATTATCTTT TAAAAATTTC TACGGTTCTA GAATTGATGC TGATACCTCT 180
 TTTTGAACTT ATAGCTTTG TAGTGTCTTT GTATCCGAAT CCTTTCTCGT ATTTAATGCG 240
 GTGAATTGTA CCTGTTATAT TGATAGTnTT GTTTAATAAA TCTATATCTT TTTCTGCAG 300
 25 TGCTTGTAGT TCTCCTATGC GCATACCACT TAAAGCCTGT ACTTCTAAGA TGCTGGCAAT 360
 TAAAATGCGA TTTCGCTTTT GTAACTTATT ATCATTTAGT 400

30 (2) INFORMATION FOR SEQ ID NO: 2192:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2192:

40 GACGACTGAG AGGCCGTTGA ATTTGACGTT GCCATATnTT CAAATTAAAC 50

(2) INFORMATION FOR SEQ ID NO: 2193:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2193:

GTTGTTTCA TATCAAAACA CCGTAGAATA AACAAATGAAT GGAATTACTT TTGCAATGAT 60

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 56 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2194:

CCAGTCACTG ACTACGTCTT CCTCGGTGCT GGCGGGTGGAG CCATTCCCTT ATTACC

56

- (2) INFORMATION FOR SEQ ID NO: 2195:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 69 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2195:

GTAGGGAAAG GAAAAACTGC TTCCATTGGG AAATGTTAAA CCTTGTTCT TGGTGATGCC

60

ATTGGGATTTC

69

- (2) INFORMATION FOR SEQ ID NO: 2196:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 55 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2196:

ATATGACACT ATATTTTATA AACATACATT TAATGATTCA TTATACAATT GCAA

55

- (2) INFORMATION FOR SEQ ID NO: 2197:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 71 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2197:

GCCCTAGTTC AATCATATAA CCATCTTTAC GATACGATTG AATCTTTCCC CCCGGACGGAT

60

TCGATGCTTC A

71

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2198:

AGTAGCACAA CAGCCATGCG GAGACAGAGA ATCGTTAGAG ATTAATGGAG ATCA 54

15 (2) INFORMATION FOR SEQ ID NO: 2199:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2199:

GGCGGGTTTA TATTTATCGT TGCAGTTATG CAAATTGTAC TTGGTAGAAG TATAGATTCT 60

25 CGTGATTGGA AAAAAGTACT TTTAACGGGA TTGGGAATAG TAATCATATC TAGCTTTATT 120

TGTGCAGTGA CACATAACTT TATATTATTT GCTATATCAA GGTTATTCA AGCAATTGGT 180

30 TGCAGGAAATTA TTCCTCTCGT GACTTTAATC TTATTAGCCA AACTAAGTAC AGATAATGGT 240

AGAGCTCAAG CTATGGCGAA CTATCAAATA TTTTTATCAT GTGCACCAGC TTTGGCACCA 300

ATCTTAGGGA GTACTTTAGG TGGCAAGATG GGGATATATT GGTATTTAG TTTTTGGCT 360

35 CGTTATATCT ATCGGTATTA TTTTTGGATA nCTnTnTTAA 400

 (2) INFORMATION FOR SEQ ID NO: 2200:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2200:

GGATATGCGA TGGATGACGC ATTGCTATAT CGGCAATTGn GAAGCTGCTG 50

60 (2) INFORMATION FOR SEQ ID NO: 2201:

- 60 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2201:

ATCGAATATC ACTACTATCT CTnTTnAAAGT ATCTACAATC TCTCCAATCT

50

(2) INFORMATION FOR SEQ ID NO: 2202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2202:

TCGACAAATCC TAATGCAATT GCTTCATGTG GntGTGGTAG TTCATATTAG AACTGCAAAA	60
GTTGCAGGTG ATCCTGAAAA TTGCTAATAA AATAACTTTT TAATGGTTAA CCCAATTTTT	120
20 GGGATACAAA TTGATATCAA TAACGATTAA GGACATATTT GATTATGTCC TATTTTGCG	180
TAAAGATATT TTGTTTTATT AAAAAGCTTA TTGAAAATTA AGAATCTGAC TATAAATAGT	240
25 ATTTTAAATG ATCGTGATAG CGGATACATT TTTAATCGAA ATCAGGCTAC GAAAAAAATTA	300
ATTAATTTTT TCACAATCTG ACTGAATCTT GCTTGAAAAT ATAACATAAA AGCTATAGAA	360
TTAGTATTGG ATTAAAAATG TCTTTTTGT GAACATCACA	400

30 (2) INFORMATION FOR SEQ ID NO: 2203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2203:

40 GCGTTGTCCT TTTCGTGACA TGAAACAATG TGGAAAACAT AATTAAATnn AGGGAAAGTG	60
TGAATAGTTA AAAAATTAGT ATTGTGTTAT AAAAATAAT TAATACTGTT AGGATTTCAT	120
45 TAACTAACCT AACGTTGGTT CAAAAATAGT TAAAAAGAGG TTAATTCTATA GCGCAGTATC	180
TCACCTTATAT AATGATAGTA GATTGTTCGT ATTACGTAAT TGAATTAATC ATATAAAAAT	240
ATATTAAGAC AAATTTATAA ATAGATTGGG AGAnTAGTAC TGTGAAATTA AAAACGTTAG	300
50 CTAAAGCAAC ATTGGCATTAA GGCTTATTAA CTACTGGTGT GATTACATCA GAAGGCCAAG	360
CAGTTCAAGC AAAAGAAAAG CAAGAGGGnG TACCACCATT	400

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2204:

10	GTTATTTGT ATGGTTAGTC TTTAAAATA ⁿ	ATATAGATAT TAAATATTAA TTTTACGAAT	60
	TGTTAAGTAA AGAAAAAAATA	TTAATCAATC CGGGTTACAT TTATGGCAGT AAAGAAAAGA	120
15	GTATAAGGCT ATCTTT		136

(2) INFORMATION FOR SEQ ID NO: 2205:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2205:

	TTTTATTTTT TCGCAATGAA AAACAATCTT TCTGCATCTT CATTATGTT	ATCTATATTAA	60
	AAATCAGTAA ATGTTTCAAC ATGTTTAAAA CCAACTTGAG CTAACCAAGA CAAATATGTC		120
30	TTTCATCAA ATGTTCTCTG AAAATGAGAC TCATCAAATC TTGAATATGT TTCATCTTCA		180
	TGTCGAATGA AAAATGTCAT ATCATGATAA ACACTTAAAG GTAAATCTCC TTGCACAGCA		240
	TCCCCATGCTA AAAAATGTC CCCTTTATCA TCAATATAAC TTGATTATT AAACAAAGTC		300
35	ATCATTTAT AACAGTATG TACATCAGAA ATAATACAC CTGAATCAGT CAGATGATGA		360
	TAAACATTGA TGAATGTTTC AATCACTGCA GTTTCATCTT		400

40 (2) INFORMATION FOR SEQ ID NO: 2206:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2206:

50	TTGAATATCA TATAAAAACA TCAGGTTCAA AGTTGACTAC TCTTAATAAT ATAAAAATAA		60
	GAATTAAAAA CATTAAACGA TACTGCTCTG AGAACTTGCT TTTAAACAAA CTTGATACAA		120

GTCAACTCGG AGATATGAAA GGAGCnATTA AATATGCAGT TAAATTTAC AATTATCCAA	240
ATGAATATTT GTTAACATAAT GTCAAAATTC CTAAGAAG AnAACAAATA GAGGATATCG	300
5 AAAAAGATGA ATCTAAAATG GTACCACTAT TTAGAAATGG ACCAAGTCC TACnGATACG	360
TGATCATATA CTAATGGAT	379

(2) INFORMATION FOR SEQ ID NO: 2207:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2207:

CATCTGGGA CGTTTAAAAA AGTAACGTAG CGAAGACTAT TGGAACAACA ATGAGAACCA	60
ATGCTAGAACAG GATCAAAAG TATTTAAAAA ATTTATTCAAT GATTGATGCT CCTATATTAA	120
ATTTnTGTTA AATCATA	137

25 (2) INFORMATION FOR SEQ ID NO: 2208:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2208:

GCGCCGCTCT GTTCATTTTA CCTAAATCCA ACGTTTCAGG AATAGATGTT TTCAAACAC	60
TTTGAAATGG AT	72

40 (2) INFORMATION FOR SEQ ID NO: 2209:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2209:

ATGTAGCAAC TAAAGATGAT AGTGGATAGC GACACGGTCA ATAAACTGCC TA	52
---	----

(2) INFORMATION FOR SEQ ID NO: 2210:

- 5
- (A) LENGTH: 206 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2210:

10	TTTTTTATGT TCTTTTTAA TAAGAGGGAA GTGAAGTTGT ATAAAAATGT ATAAATATG	60
	CACTTTTAT ACATTAACGA TTCATATATG TCTATTATGT ACCAAATTAA TAATTTGTAT	120
	AATTTTCGAA CTGGTTAAAT TCGAAAAATA TCACIAATAT ATnTAGATCG ATGTGTAACA	180
15	TTACGTTCTA nTAATTTAAT GTTGCA	206

(2) INFORMATION FOR SEQ ID NO: 2211:

- 20
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2211:

ACGATGTATT TTGATATCGT TACCAAAGTC TTTAATAAC TCATTTTCAT CTAAATAAAT	60
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30 (2) INFORMATION FOR SEQ ID NO: 2212:

- 35
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2212:

40	TGATAAGGTT TGTCCCACATCG CTATTTGAAA TGATGCATTG TAAAAAAACTA TCATTTGTTG	60
	GTAATATCTT AGTTGATGA CTTTCTTTCC AATCTTTCCG TGTCAAGAGAG ACAAGATTT	120
	TTGTAGCTAT CTTAGTTGCT TCTTGAATGT TCATTTGTTA TTCTCTCTTT TAAGATGTTT	180
45	GTnTTTCTTT AAATGCTAAA ATAATTGATT TCTTTTATC ATTGTGAAT ACGAAATTTT	240
	CGTATTCACT ACCTAAAAAA ATATCATCAT ATTTAACATT AAAAGCACTC ATATACTTAG	300
	AAAGTAAACT AACnTTAATG GGTGTAGAGT C	331

50 (2) INFORMATION FOR SEQ ID NO: 2213:

- 55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2213:

AGCATAAAACC AAAAGATGCG GATATACTTG AACGCGTCAA AGATATACTT AATAAAAAG	60
10 A	61

(2) INFORMATION FOR SEQ ID NO: 2214:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2214:

TCTATTGAG TTTACATTG ATTAAATGAA TGACAATTAT ATGAACCTGA CTTGGT	56
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(2) INFORMATION FOR SEQ ID NO: 2215:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2215:

ATACCACTAC TATACAGTTA AATTAATATA CGTTAAAAC TTAATCCGAT ACATTGGTTA	60
AAATGATGTT CCTCGCTGGT GGATCGAGAC ATACTTCGCT CTGACTTCCT TAGTCAGTT	120
TTTTTCAGCT TTTTAGGTGT AATCACTGAC TTGTTACAT CACGTCAAAT TTACAGTCGC	180
40 TATTATCTTA ACTTATCnAC GTTTATCACA CATCAATTCA GATATTATAT TGCATTGGCG	240
nCTATCACTT TGAACCTGCT GTGACTGGAA CTACTGGCTG TCAAnGAGCGA GGGCTGATAA	300
TGAGCATAAA GCAACATATA AGTAATACGG CCGAATATGT AAATTCGGCA GCTTTAGGCA	360
45 ATGCTGCCCG GGCATGACTA GnACATTCAc AAGAAGCTCA	400

(2) INFORMATION FOR SEQ ID NO: 2216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2216:

5	TTTTAAAAAA AGGGGTTAAC CAAAGTTTG GAACCCAAA AAATTCCGGA GTTAAAAAAA	60
	CCCCAAAAAA TTAAATTAAC CGGTTATTCC GTTCCAGGAG CCAAATTTTT ATGGTTCCAA	120
	TTnCCAAGT GGG	133

(2) INFORMATION FOR SEQ ID NO: 2217:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2217:

20	TACTCGTACC ATTAACCACT CTGATTAACC ACAATACTAA GGTATTCAAT ACATCACTGA	60
	CATC	64

(2) INFORMATION FOR SEQ ID NO: 2218:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 82 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2218:

30	TATTCTATAG AATATGGATA ACGTTAACCA TGATGTAGAG TATTCATCAT TGTAACACGT	60
35	CAATTTGATA TGTGAGATTA AC	82

(2) INFORMATION FOR SEQ ID NO: 2219:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2219:

45	TTTGACGCAA TGATTTAGCT GTAAATATGC AATCTAAAGG AAAGTACCAAC TTATGAGATG	60
50	TATTAACG	70

(2) INFORMATION FOR SEQ ID NO: 2220:

- (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2220:

10 AAAATTACCCAAAGAATTGAAATTGTGTTGGTACCGGGTTAGATTAATCC 60
GGTGA 66

(2) INFORMATION FOR SEQ ID NO: 2221:

15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2221:

GATCGCAACC AAATAATGG TCTTCCTGGA TTAAATTACCTTT ACCAGCTGGC ATAC 54

25 (2) INFORMATION FOR SEQ ID NO: 2222:

30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2222:

GTGTTGCTAC AGCTAnCATT TCATATTTAA CGnGTTGTGG TATTTCTAAA 50

(2) INFORMATION FOR SEQ ID NO: 2223:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2223:

AATGGGGGnA CCCAGCnTGA GTTATGTCA~~T~~ CATATCGGTA TGTGATAACAT 50

50 (2) INFORMATION FOR SEQ ID NO: 2224:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs

59

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2224:

GTAGATGCCGC CCTCATATGG ACAAAAGATAA AGTATCAGCA GATTGGACGC TTTA

54

10 (2) INFORMATION FOR SEQ ID NO: 2225:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 63 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2225:

20 CGAGACTTCA CTTTGACTAA ACGCGTTAAC AATTTAGATT ATGCTTACGA TGAAGAAGAA

60

TTA

63

25 (2) INFORMATION FOR SEQ ID NO: 2226:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2226:

35 TGGCCATTTC TAATGGGGGG AAACCTTAAA AAGGGGTTTT TAATTTTAAA CCAAG

55

(2) INFORMATION FOR SEQ ID NO: 2227:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 131 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2227:

TCCATTGTTG TGCTTCTTT AAATAAACCT TGGATTATGC CTTCTCTCCG GTTAATTAAT

60

GGGACCAGGG GCCAAAAATA CCCCTTTTA AATATAnATT CCCAAATCC ATAGTTAAAT

120

50

AATCCATTG C

131

(2) INFORMATION FOR SEQ ID NO: 2228:

55

- 5
- (A) LENGTH: 350 bas pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2228:

10	CCATCTGTGC TTCTGTTAGGC GCTTTGGCA TCACGGTGAT GGTTTGCAGAC AGATCCGCCA	60
	TCCGGCTGAA TGGGAAGCCC GCGTTAnAAA GGCGCGTAGA TCCGGCATCG GGATGAAAGTG	120
15	GTAATACTTC GAGAAGTCGA TGGTGGAGTC GTCACCAATC ACCACATGAT TCTGCACCGG	180
	CTGGAAGGTA ATACAGTTAT CCACCGAACCC GCCCCGCATC GGGTCATAT ACTCAAAGTC	240
	GAAGCGCACT GGnTTGGTC GCGCCCAGTT TCAGCGCCGG AATAGAGACA TCTGTTTGC	300
20	CATCCAGCAA ACCTTGTAAT ACCGGAnTCC GCAGCAGCAG GCGGTTTCGC	350

(2) INFORMATION FOR SEQ ID NO: 2229:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2229:

AACTAAAAAT ACTATATAAA AAAGGTTGTT ATAATTAAAT GGATATAAAAT AAAAACGA	58
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(2) INFORMATION FOR SEQ ID NO: 2230:

- 35
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2230:

45 GGGCGAAAGC TGGACGGAGC CAACGTCGCG TGAGTGGATG GAAGGTTCTT	50
---	----

(2) INFORMATION FOR SEQ ID NO: 2231:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

AGCCATACGT GGTAAGCACA TGCTAAATTG GCCAGCCTGA AAATGTTTAG

50

(2) INFORMATION FOR SEQ ID NO: 2232:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 132 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2232:

15 TGTATCATTT TGGCAAAATC ATAATCTTCA TCGTCGAATA CAACTACTTT TAAGTTTAAT
 GATGAAGGTA CGCATTGTGT AATCACTTCA TCTAACCTTT TTAAATCAGG TGTCATAGTT
 GAACTTGnG GT

60

120

132

20 (2) INFORMATION FOR SEQ ID NO: 2233:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2233:

35 GATCTTGAAAG CAGTTGAAAC ATATGTATCA GATGCATTAA GACAAGTACA CTTACAATCA
 GACATTTTTG CTGTATCA

60

78

35 (2) INFORMATION FOR SEQ ID NO: 2234:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2234:

50 TTTAGGCACA GACGGTAATA AGCTACAATT TTCATAAAAT CATCTCCTTn

50

(2) INFORMATION FOR SEQ ID NO: 2235:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

65

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2235:

ATCCTGGAAA ATCTGGTAAG ATATCTTGGA AATAACTAAT ACCAATTCCCT AAAA

54

5 (2) INFORMATION FOR SEQ ID NO: 2236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2236:

GGGTGATGGT CATTGACAAA GTCAACTTGT GATAAGCCAT GGATATTTTT CGTT

54

(2) INFORMATION FOR SEQ ID NO: 2237:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2237:

TTATTTACTT TAAATTTCTC AATCTACAGT GTAATCTTAT TTCTTATTAT

50

30 (2) INFORMATION FOR SEQ ID NO: 2238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2238:

CCTTAATGGG TTTTGGGGGG GGGCCCCCCC GGCCCAAAAC CTTTGGCCCA ATTGGTCCT

60

GGGTTAAGGA AAAA

74

45 (2) INFORMATION FOR SEQ ID NO: 2239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

CCACCCATGG CGCTTGACAA AATATGGATG GAACATAACC ACACCGTCCA AGTTCAGTGT 60

TAGCACCGTG T 71

5 (2) INFORMATION FOR SEQ ID NO: 2240:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2240:

CAGCTAGGTA GTTAGGGATT CGACTCGTAA AACGGATTAA TAGGTTTTAT AAGAAGGGGG 60

TTTG 64

20 (2) INFORMATION FOR SEQ ID NO: 2241:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2241:

CTTGACACGT ACATCTAATA CGACAGTCTG TGCCTTTAAA ACCTTTGGG TCAAAC TG 58

(2) INFORMATION FOR SEQ ID NO: 2242:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2242:

GACTCATCAC CGnTTGTTAA GAATACAAT TTATTACCCA GCAAnTTAAC 50

45 (2) INFORMATION FOR SEQ ID NO: 2243:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 71 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

AAATTTGGAT TGGTTGGAAA TTTACAGTTA AAATTTAAAG GGTGGATGGA AAAATTTAG

60

GAACTTCTAA G

71

5 (2) INFORMATION FOR SEQ ID NO: 2244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2244:

GGGGGGCCCT TGGGGGTTTG GGTTTTGGGG GGCCCCCTT TTAAAAAAnTT

50

(2) INFORMATION FOR SEQ ID NO: 2245:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2245:

30 TTATAATTTC TGAAAATAGA AGAGGGAAGC CTTAAATTAC CAAATGGATT TA

52

(2) INFORMATION FOR SEQ ID NO: 2246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2246:

ATTAGTTGAA AAGTACAATA TTCCGCAAGT TACCAATCGA TACAGGTATT ACAAG

55

(2) INFORMATION FOR SEQ ID NO: 2247:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2247:

55

(2) INFORMATION FOR SEQ ID NO: 2248:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 107 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2248:

GGGAAGGTAA AACTTCCTGC TTTTTTATA AGTATTCTATA CTCTATTGCT ATATTAGTAG	60
AAACCGTAAA ATCAGTCATT CACATACATT nTGAAACATC TAAATAG	107

15 (2) INFORMATION FOR SEQ ID NO: 2249:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 168 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2249:

GTTGGATACC TGnAACTAAA TAACTATTCT TTAAAAGTTA AAAACCAACC ACTAGTGGCC	60
ATTGGGGATT AAAATTCCAA CCTGGGCCGG TCCATCCCCA TGGTGGGTAA AATGGGGGAG	120
GGAAAATCCT TATTAAGCCAA AGGATTCCCT ACCTAATAAT AGGGGGAA	168

30 (2) INFORMATION FOR SEQ ID NO: 2250:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2250:

TTTAGTTGTG ACATACTGAG AACTGTAGTA CTTAGTGChA TACCAAAGGG	50
--	----

45 (2) INFORMATION FOR SEQ ID NO: 2251:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GCAGAACATA CCACGTGTCG CTGATTACCA ATACAGTAGA TCAAGATGGA CTCGATTGC

59

(2) INFORMATION FOR SEQ ID NO: 2252:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2252:

15 GTTTGTGTTT TAATTTAAG GGGAGGGAT TTTTTACCA AATGGGAATT TT

52

(2) INFORMATION FOR SEQ ID NO: 2253:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 80 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2253:

AGTGTAATTA GAAAGGCAAG TACACCTGTT TAAAGTTAT CTTCTAAGAT TTGTTTACTT

60

30 TAGAACTATA GCAGTTAAC

80

(2) INFORMATION FOR SEQ ID NO: 2254:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2254:

GTAAATGACA GAGGAAATAT AACAAATGATT AATAATGTTA CAGCATTAC TGCAAATATC

60

45 TACTAT

66

(2) INFORMATION FOR SEQ ID NO: 2255:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

ACATGTGTTA ACTCTTGCGC AATATATCCT GTTCTTCCTT CTAATTACG

50

(2) INFORMATION FOR SEQ ID NO: 2256:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 10 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2256:

15 AATCTTTTAT AGGAAAGAAA GAAGAAGATG TTATCAGTTG CGATTATCGG CCCAGGCGCT

60

GTCGGTACA

69

20 (2) INFORMATION FOR SEQ ID NO: 2257:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2257:

30 TAGCGGGAGA TAGAAAAACC ATTCCGCATT AGCTTGGTC AAGTTGGAA TGGGTAAAAA

60

AATA

64

(2) INFORMATION FOR SEQ ID NO: 2258:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2258:

45 GGTTAAGGTA TGGCGAAATA TCTCCAACAA CACTCAAAA GGTTCAAGAA AATAGAAGTC

60

GAUTGAACAA TGTCATTACAC ATGTGTGCGT CATGCACACC nTATGT

106

(2) INFORMATION FOR SEQ ID NO: 2259:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 55 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2259:

CGGAATAACT GACTATGTAT CATTGATGT TATTAACATC AATATTTTG GTTAAATGAT 60
 5 ATGCTAGAAA TAAAGCATA 79

(2) INFORMATION FOR SEQ ID NO: 2260:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2260:

GCTGGnTGTT AnTGGCAGAG CATGTGAGCT GGATAATCAG TTGGAGAGGC 50
 20

(2) INFORMATION FOR SEQ ID NO: 2261:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2261:

nCCATTAATG ACCGAGATTA GTGAGCATGC ACAAAATTGTT ATGGTAGGAT 50
 35

(2) INFORMATION FOR SEQ ID NO: 2262:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2262:

AATGAACCAC ATAATGACAA CTTGAATGAC AATATGAATA TGATGTCAAC A 51
 45

(2) INFORMATION FOR SEQ ID NO: 2263:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

CATTAGGTGC TTATATAAAT TACTTGTGG TGGCTCCAAA ACTTCGGGTT AAAAC

55

(2) INFORMATION FOR SEQ ID NO: 2264:

- 5
10
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2264:

15 TTTCnTCCCC CCCCCGGGGT TTTTTGGTCC CTTTTTTTTT TTAAATTCCC

50

(2) INFORMATION FOR SEQ ID NO: 2265:

- 20
25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2265:

30 TCATTCA TAG AGGTGTAAAG ACATAAGGGG AGCTTAACTG CGAGGACCTA CA

52

(2) INFORMATION FOR SEQ ID NO: 2266:

- 35
40
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 55 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2266:

45 AGATGATGCA ATAATGGTGC AGTATAGAAG TACTGAGCAA TGCAAATTT AGACG

55

(2) INFORMATION FOR SEQ ID NO: 2267:

- 50
55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2267:

GTTCATCAC A TTTATTACAT TCAGCGTTGG AATCAGTACT GGGTTATCAT G

51

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2268:

CTGTTGACAA CAAATTAAAA ATGACAACAT GTCGTAGTTA TAGTTAATTG ATTG

54

(2) INFORMATION FOR SEQ ID NO: 2269:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2269:

25 AACCAAAAAG AAAGCAAGGT CAAGGAAATT TCAGCGnGAC GTATCTTAG TTTTGAATAA
 GCATATTAAT ATGGTGATAA TATGCAAGAn AACCTGTTTA TTTCGATTCAA TGAAATTATA
 TTATTAATAT ACTTAATCAG TATCATTG TATTTTTATG ATTTTGTCACA AAAAAGTCAT
 AAGATTAGAA GTTTAGGCAT ATATTTATTG GGGATTGTTT GGGTTTTACA AACAACTCT
 TTATCTATTT TTATTATACA AACTAGACAT ATTCCATTAG GGnCTATTTC AGATGTATTC
 TATACTTTAA GT

60

120

180

240

300

312

35 (2) INFORMATION FOR SEQ ID NO: 2270:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2270:

GTTGATGGAT TCTCTTGGTT TGGTGTAGTC ACAATTCTG AACTGGCCCT TGTTTACG

58

(2) INFORMATION FOR SEQ ID NO: 2271:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2271:

CGTTCAGACG CTAAATCAGG CACCAGGTTG TACAATTGTC CTGGTTCTTC

50

(2) INFORMATION FOR SEQ ID NO: 2272:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2272:

CAGGTGTTGG TAAAACATTT GAGATGCTTT CAAATGCCAT TGAACATATTT CAAAGTAA

58

(2) INFORMATION FOR SEQ ID NO: 2273:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2273:

30 TTATAAATTG GTGTAACAAT TTCATACACA TGATCATTCT TTGATTGAGG TAAAAATGAT

60

TCTACTAAC GTACACGTT ATGCTTCTTA TATTCTTCA TCAATAATAA TCTATGATTA

120

GCTAATGATA AATTAGTAG AAGCTTGTAA TCTCCATAAA CTAAATTCAC GATATTAGGT

180

35 ATATTGAATT GTTCTTGATA TTTCAAAAAT TGTTGATCCC ATTCTTCATT TTTAGGTAAA

240

GGTAATACCA TCTCGTTAAT TTTCCAATAT GCTGGTTAA GAATGACATT TTTATATCTG

300

40 ATTCGTGGTG AATAACTAAA TGAATCAATA CTCACATCAT TCATAGGTTA AATGCATTTC

360

ACAGATTCCA TTGAAATTTG TCGTAACAAAT CGATATnAAT

400

(2) INFORMATION FOR SEQ ID NO: 2274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2274:

55 GGGTACAAAT TTGTnGATGA TAGAAAAGTT CGTATCGCTA GAAAGTCTGG

50

- 5 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2275:

TGATTTACCA GTTGATTACG ACAAAAGAAGA ATTTCAAGA ATTGTGAAG CATCAAAACG	60
CATTA	65

15 (2) INFORMATION FOR SEQ ID NO: 2276:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2276:

ATGGCGTTC ACCAGCAGTC AATAATCCTG TTGGGATAAA TGCCAACTACT GTCGA	55
--	----

25 (2) INFORMATION FOR SEQ ID NO: 2277:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2277:

TAATAAAATCA CGTGCATTTA CGCTCACTAG CTTTCATCTC CTCATTTTG CTTTCAAAT	60
TTATTAAGTA TGAATA	76

40 (2) INFORMATION FOR SEQ ID NO: 2278:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2278:

GTTGGCTTTGTT CTGTGTTATT GTAGTTTGTT TTGGCTGCGT CCAGCTTGC TGCTTTCCC	60
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(2) INFORMATION FOR SEQ ID NO: 2279:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2279:

TTAAGTGCCA AAGTCCTTGG TAGCCAGAAT GAACCACCAA CCTCCATT TT TCCAAAAATG	60
15 GTCTTACCT	69

(2) INFORMATION FOR SEQ ID NO: 2280:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2280:

GGATGGAATT GGGTTAAGAA TAAAAAAGGT AATAATTGAG TTTATGATAA TAATAATAAT	60
30 ATTGAGA	67

(2) INFORMATION FOR SEQ ID NO: 2281:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2281:

TTGTTACTTC GGCACGGATA AATCCACGTT CAAAATCAGT ATGAATGATA CCAGCACATT	60
45 GAGGTGCAGT CATAAC	76

(2) INFORMATION FOR SEQ ID NO: 2282:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AACCCAGAAG ACTTATTATT AGAATCTAA TCCACAACAC AAAATAGTTT ACTATTCTA	60
AAAGCGGGAT TAAATCAATA ACAAACAGCA GTAAGATTAT TTCCTAGTCG AAATATCTA	120
5 CTGCTGTACT TTATTT	137

(2) INFORMATION FOR SEQ ID NO: 2283:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2283:

ACAAAGATT ACTATTTAAC TAATTTATAT GAAGAATAGC TTTCCCTAAT AA	52
--	----

20 (2) INFORMATION FOR SEQ ID NO: 2284:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2284:

ACTCCTGCAT ATCACAACTA GATTAAATAT ACATCAAACA GATATAGTAA A	51
--	----

35 (2) INFORMATION FOR SEQ ID NO: 2285:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2285:

CTAACATGTG TGAACGATAT GCAAATTCAA TATCTCATTC ACGCTTGCA CTTTATTACT	60
--	----

ACAATCAAACG TAACTAT	77
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(2) INFORMATION FOR SEQ ID NO: 2286:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2286:

AAACCTGTAT TTTAATAAAA CAATCGCTTG GACCTATTCA CTGCAGCTCT TCTGGGAC

58

5

(2) INFORMATION FOR SEQ ID NO: 2287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2287:

AATTCAATAA ACCAATAAAAT AAGAATTTTA TAGTAAAAGG AAATGGGAAATA GAGTTGGCAG

60

20

ACTTATACAA TATTAAAAAC AAAGAGCTTT TCACGATTAA AAGAGGAATT AATACATCTT

120

TATCTCTTTA TAGTCTAGAA CAGGAATATA ATAACAATTA ACGCCTTAAA ATATCCAGAA

180

TCATATAATT TTGAAGAATT AATA

204

25

(2) INFORMATION FOR SEQ ID NO: 2288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2288:

GCTCGTAAGG CGTCAACTGT GGCTTGGGT GCTACATGTA AAGGTTACTT

50

35

(2) INFORMATION FOR SEQ ID NO: 2289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2289:

TCGCTTCGGT GGTAAAAATG TCGTGGAGGT CCCGTTGCAG ATGGTTTAA ACG

53

50

(2) INFORMATION FOR SEQ ID NO: 2290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2290:

TTGGAGGTCA ATGTTCGGCG TAATCTTCAA TGTTTCGTA CACAATTGCT GCGGTTGACA 60
 5 CACATACG 68

(2) INFORMATION FOR SEQ ID NO: 2291:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2291:

TTCGACGAAT TAAAACAAAT CCTTTTATAT GTTGAAGTGT ATTGAGATT AAA 53

20 (2) INFORMATION FOR SEQ ID NO: 2292:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2292:

ATCAATTGTC AACATCTAAT ATTCACTACC AATTATATCG CCACATGTTT TTTAGCAGTA 60
 ACA 63

35 (2) INFORMATION FOR SEQ ID NO: 2293:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2293:

CGACTCAGGT CCATCAAGAG AGACACATTT CGACTACAGG TTATTACTTC TTTGA 55

(2) INFORMATION FOR SEQ ID NO: 2294:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2294:

AAATTTGGT TAATTTAAA ACCAAAAAAC CTTGGAAGGA AATGGCCCTT TTCCCAATT

60

5 T

61

(2) INFORMATION FOR SEQ ID NO: 2295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2295:

AATCTTAAA CCTATGGCGT CTATTACATT CCCAAAACCT ATTTTCAGnA ATGTTACCAA

60

20 TTAAACTTGC CGGGGTATGG ACCAGGGTAC CAGGCTAAAA ACTGGAAGAA AGGAAGGAAT

120

TTTAGAAAAT AATTTATTAA CATGGACCAG GTAACTAA

158

(2) INFORMATION FOR SEQ ID NO: 2296:

25

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2296:

35 TGTTCCAACG ATGAATGTTT GCATGCTTG TTGCACTGAA ATTGATGAGT TGCTACTTGC

60

AATCCTAG

68

(2) INFORMATION FOR SEQ ID NO: 2297:

40

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2297:

50 GTAGGGATT TTTTAACCG GGATAGCCC ACCAAAATT AATTAATTGG GGGTTTTGG

60

ATTGAAGGAA TT

72

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2298:

AAAAAATTnTA CCAGGTGAAA AATTATTTG GTAGGATTTA AATnTAATGG TTTAAATGGT	60
GGTTTATTAC CTAATTAAA AATGGTTAAA AGGGCCTTTA CCATTTTAA AATTTAATCC	120
GCCTTTGGG AGGGGGATT TAGGGATGGT CCAGTTAGGA CCCCATTACC ACTGGAAACC	180
AACTTAAAAT TTGACCAAAT TTCCTGGAAA AAA	213

15 (2) INFORMATION FOR SEQ ID NO: 2298:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2299:

TATTTTTAAA GGAGGGTAAT AATCTTAATT TAAGTTCAT TTTTTACTT TCATTATAAA	60
TATTTAATGT TACTTTCTTA TTTAGATAAC AATAAAAAAA TATAATCTCT nAAAACCCAA	120
TGAAACAGCT GCTCCAAACA ATTAGTTCTT CTAATTGAA	159

30 (2) INFORMATION FOR SEQ ID NO: 2299:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2300:

ACAAGGTCAT TCGGATTGGA CTTTGTTCA ATTGTTAAAT TTTGCTCCAT CAATTGTCTA	60
ATTCT	65

50 (2) INFORMATION FOR SEQ ID NO: 2300:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2301:

5 TTTATTCCTA TTTAAAAACC CAnTGAAAGT AnTCTTTnCA TTAnTAAAAA

50

(2) INFORMATION FOR SEQ ID NO: 2302:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2302:

GAGATATATG CATGAGCTCT ACGACTTCCT TAGGTTTCAT GGCGACTATC CTGGCAGGGA

60

20 TG

62

(2) INFORMATION FOR SEQ ID NO: 2303:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2303:

ACCAATCCCG TTGTTTGGT TTTTTAAAAAA AAGGAAATTC CAAAATCCC CCATTT

56

35 (2) INFORMATION FOR SEQ ID NO: 2304:

(i) SEQUENCE CHARACTERISTICS:

- 40 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2304:

45 TTTAAAACCC AACGGGTTTG GTTAAAATGG CCTGGGCTTT TCCAAAACCTT GGC

53

(2) INFORMATION FOR SEQ ID NO: 2305:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2305:

CGAACAGGTT GCCACTGTAA GATCTGGTGG CATTAAATGG CAATCGTATT TTATITGGAG

60

5 (2) INFORMATION FOR SEQ ID NO: 2306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2306:

CTTTATAATG CGGGCGCACT TGGCATCTCT GCATTCAGTT ACACGCGGTG GCAACACAAA

60

ATTTAGGGAA TTCT

74

20 (2) INFORMATION FOR SEQ ID NO: 2307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2307:

TGTCCATGCA CAGCTTTATT GGAATTTACC TTTTACAGG CAACCGCTAA AGA

53

(2) INFORMATION FOR SEQ ID NO: 2308:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2308:

TAAATGATTA TGGGAATATC CAAAATTATC GAGATCTAAT ATGAAGTGAC TGCACACATA

60

45 TCAGCTCTGA ATGAAT

76

(2) INFORMATION FOR SEQ ID NO: 2309:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2309:

5 TCCTCAAAAT GTGAGTTAAT AGTCGAGTGG AAGCTGTGAC TTGAGCGACG ATACATCATC 60
 AnACTATCAA TAATGTTTGC ACATCACTTT TACTACTATC ATTTGATGTA TAAATAC 117

(2) INFORMATION FOR SEQ ID NO: 2310:

(i) SEQUENCE CHARACTERISTICS:

- 10 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2310:

AAACTCATAT CGCTTCCGAT AACCAACCCT GCTGCTGTTG GTACAAATTG TC 52

20 (2) INFORMATION FOR SEQ ID NO: 2311:

(i) SEQUENCE CHARACTERISTICS:

- 25 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2311:

'AACACTGGAG TCCTAATGTC ATCAAACATC TACCTATAAG ACCTTATATA ATCGTC 56

(2) INFORMATION FOR SEQ ID NO: 2312:

(i) SEQUENCE CHARACTERISTICS:

- 35 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2312:

GATAACATCA TAGGCCATAA CTTCCATTAA GGCCATCAGT TATAGCATGC GGACGACATA 60

45

CTGTGCCATA TG 72

(2) INFORMATION FOR SEQ ID NO: 2313:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2313:

CATCTAATGG GAACGTGTCG ATCCTAGTCA GTATAGTCAT CGGCAGGTAC GA

52

5 (2) INFORMATION FOR SEQ ID NO: 2314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2314:

TAAACTGAAA TTTAATTTC GGATGGTATT GTTATTAAGA AATAGACATA ATTTGTGCTG

60

GATA

64

20 (2) INFORMATION FOR SEQ ID NO: 2315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2315:

CTAGTTTAAA TTTCTTAAAC TTCTACATCA GTAAAAGGCC GCTCTGGGAC CATAACAATC

59

(2) INFORMATION FOR SEQ ID NO: 2316:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2316:

GCATAGTAAC TTAATTGATA GGAGATGAAA ATCCGCAAAG TCATTGGAAG GATT

54

45 (2) INFORMATION FOR SEQ ID NO: 2317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

GTATATGCTG GAAAGATAAA GTATGGAAA TGCATGGCGA ACATTTGTA AGCAGAATGA	60
GCTATAAGCG TTGAATGGGT TTGAACGTAAC ACAATCGAAC AATGATATGT CAGACACT	120
TGCTTTAGAG CACATTTAGA GAGCGACATG	150

(2) INFORMATION FOR SEQ ID NO: 2318:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2318:

AAATCATCGA TGTTAAATAA TTTAATGACA AGGATTAATG AAAGACGGAT TG	52
---	----

20 (2) INFORMATION FOR SEQ ID NO: 2319:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2319:

TTAAGGAAAC CTTGGCCAAG GTTAAGGAAA ACCGGGGGTT CCAAGGTTTT TA	52
---	----

35 (2) INFORMATION FOR SEQ ID NO: 2320:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2320:

ATGAAGTTGA TTTAGGATGA AAATTAATCT TGGGATATTT AATACTTTGT	50
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50 (2) INFORMATION FOR SEQ ID NO: 2321:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CTAACGCTAA GGGCGACGGA TGGTGGTnAT GTCAAAGAGA CAAATAGGAT

50

(2) INFORMATION FOR SEQ ID NO: 2322:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2322:

15 CGTGGTGATT AATTTTCGT CGCGTTTGT TTCCCTTCCC CAGTCATGTT TTATCATTGT 60
 GGGCATCATT GCACCTGGGT TCCATATTAT GACGTCATTT TTTAnAAT 108

(2) INFORMATION FOR SEQ ID NO: 2323:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2323:

30 GTCACCGAAT TTCGATTAT ATTATCACTC AATTTATTAT CTTGAAGCAC GCGTTAAATC 60
 GTCTTTAAAT TGnAACAGTT GCTACTTTAT TGTCTTACC ATTGATCTGA ATTTGATCCG 120
 CTTTAAGTCC ACTATCTTT ACAACCTGCn CTACCTTTG TTGAGTAATT GCTTGTAG 180
 35 ATTGGAAATC TACGCGTGTA CCACCTGAAA AA 212

(2) INFORMATION FOR SEQ ID NO: 2324:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2324:

TCATTTGTTT TTAATACGTT GTCAAAATTA CCAACAAATG ACAAAATTAAA TTTTGCAATA 60
 50 CATATCAAGG TGTTATTTT TTCTTATTAT AATTATGTAT AACGCATTAA AAGTGACGTn 120
 AATATTCAAA GGA 133

(2) INFORMATION FOR SEQ ID NO: 2325:

55

- (A) LENGTH: 216 bas pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

6

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2325:

10	ATGAACGACC GTGGACAGAC AATATTAAA GCATTTAAAA ACAGCGTTCC CAGAAAGACA	60
	ATATATAACC AATATTAACA AAAGCAATGC ACATTACTTC ACAAAATGAAA TCAAAGCAAC	120
	ACACATATAAC AATGCAATAA GCGGGCAACA ACAAACAGAT TTCAACACGC CTGTCATACA	180
15	GCAATATCGT TAACAAATGA CAnCCGCCnT TTAGGC	216

(2) INFORMATION FOR SEQ ID NO: 2326:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2326:

30	TGACCATATG ATTGAGGAAG GTTTTATTGA TCCTAAGTAT CGTGCTCTTG CACCGTTATG	60
	CGACACTAAG GAATCATTAA TTGAATCAAT ATTAAATTn AACCTCTGG GTACTCGTTC	120
	ATACGATTAA TCATTCTAAG G	141

(2) INFORMATION FOR SEQ ID NO: 2327:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2327:

45	TGAAACTGCA GCGTGGCCGA GTGGGGTTG TGCCAGGTGA CCCCAGATGG GCGTG	55
	(2) INFORMATION FOR SEQ ID NO: 2328:	

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

GAAGCCAGCC TAATGGATA CCACCGGAAG TAACTTTGCA CCAGGGCCGT CGCA

54

(2) INFORMATION FOR SEQ ID NO: 2329:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2329:

GTTCCCGGGT CCAGGCCGTT GTCTTGTGCC GGGGTGTTTG GTCCCTGGTT GTGT

54

15 (2) INFORMATION FOR SEQ ID NO: 2330:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 190 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2330:

TATATTATAT ATTTAACTGC TGTGATGTAT TCTGAAAAAA TAGTAGTATT GCCTATAATC

60

ATCTATGCCA TTGTGTTTGT AATAATTGGT ATCACITATA TCTTTATAGG CGACAGCTAT

120

30 GATCAATTAA CAAATTCAA TGTGATTTTG TATATGGGA GTTTGTnTTA TGCATGGATG

180

GCTATTAGAA

190

35 (2) INFORMATION FOR SEQ ID NO: 2331:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2331:

45 TTTTCACCTC GTGTTTAAAT TCACATTGAA TCTAAACTAA AAGTACCTTT AAGT

54

(2) INFORMATION FOR SEQ ID NO: 2332:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 246 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2332:

5	TTCTAAAAAT ATTAACGAAT TATACAACCT TAAGAGTTTT TAGTATGTAA ATATTCTTTT	60
	CATATTAATA CAATACACCC CTATATATGC TCACCTGTTT GAATTAATAA ACTTTAGCAT	120
	TCTGCAAATA ATATTTAAA AATAACTATA CTTTTTATTT ACCTATTGAA AAATAGTGTT	180
10	ATCATATTTA TTAAGAAGCT ATTTTATAC TAGTAGGTGT CAGTCATGAA TAACATTTG	240
	TTAAAT	246

(2) INFORMATION FOR SEQ ID NO: 2332:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2333:

25	CCTTCTAACCA TCTTTTACC ACTCATTGAA ACATGTGATC CTAATAACAT AA	52
	(2) INFORMATION FOR SEQ ID NO: 2334:	

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2334:

35	AGAAAAGAGA CTGAAACAAAC AAATTCAAGGC AACTTTGAA CAACAGAGAC ATCGATTAAT	60
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(2) INFORMATION FOR SEQ ID NO: 2335:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 193 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2335:

50	CCTCAATCAG CTCCTAAAGA ACAAAATAGC GACTCGATTG ATGAGGAAAC AGTAACGAAA	60
	AAAGAACGAA AAAGTAAAGT AACACAATTAA AAGCCATTAA CACTTGAAGA AAAGCGGAAG	120
	TTAAGACGTA AGCGACAAAAA GCGAATCCAA TACAGTGTAA TTACAATnTT GGTATTGTTG	180

55

(2) INFORMATION FOR SEQ ID NO: 2336:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 bas pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2336:

CCTACAGTCC CAACACTGTC AGTACACTGC CGATACCCAA CCTCTGGCCG GTCCGGCA 58

15 (2) INFORMATION FOR SEQ ID NO: 2337:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2337:

ATATTTTTnA TTTAATGGTT TTACTACTGC TACAACATAC ATAGGTGGCA 50

(2) INFORMATION FOR SEQ ID NO: 2338:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2338:

CTCCTGTAGA TTTAAAATCT CCTAAATAAC AAACGAATAA TCGGCCATCT TTATGTATTT 60

40 TGATTGCTGC AGGATTGCT TTGTGACTTA CAAAAGGTG TTTGATTTCC TTCGTTTCAG 120

GATTGATTT GAAAATATTG CCTTCGAATA CATCCAATAA AAAGAGTTGT CCCTGCCGAT 180

45 CAAAGTTCAA TCCTTCTAGT TGCAATCCTT TTTTGGAAAT TTCAAGCCAT GGTTCAGCTG 240

TAATTGTTG TAATTCACTT TCAGATATAA TTGGAACAGC ACTATTGGAC TTCCCCnAT 300

AAAATAATGG AGGGnAAAnC TGGTGGGGAC ATCCATGAGC CATTCCCTTC CATTCCATTc 360

60 GGTTTTAACT AACCAATT 378

(2) INFORMATION FOR SEQ ID NO: 2339:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2339:

ATGAAAATAA ACTGTGTCTC CnGATGTATA CGTCCTTCA AGCAGACTTC

50

10 (2) INFORMATION FOR SEQ ID NO: 2340:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2340:

20

TATCCATATG TGAAAAATGT CATATATGAG TCTAGTTTG TATAAATGGA GACTCGAAC

59

(2) INFORMATION FOR SEQ ID NO: 2341:

25

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 189 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2341:

ATTGATAAAA TATGATTAAG CGTTGTTGCA AATGACATT TCTAAAAAG CGCTTCACTA

60

35

TCAATTGGTA CTTGTGTGTn AATTTCAGCC AGTCGCTTCG ATAAATATAG TTCACTCTAAA

120

TGTGTCATTAA TCTTATTACG TTGCCAGCT GATAATGCAT CAATGTTTC AACACACATT

180

TCAACGCTT

189

40

(2) INFORMATION FOR SEQ ID NO: 2342:

45

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 165 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2342:

ATCAATTAAA ACAAAGCATA CAACAATTG TTGATGTTGA ATCTAAATCA ATTGAGAAC

60

AACAAATGAT TCATCAGCTT CAACAAATGG ATCGTTCTTA TGTAGAGATG ATTACAGAAT

120

55

(2) INFORMATION FOR SEQ ID NO: 2343:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2343:

CTTAACCCCC CTTTTTCCCC AATTTTAATG GGGAAAAATT GTAATTAACC TGGC

55

15 (2) INFORMATION FOR SEQ ID NO: 2344:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2344:

26 GACAAATAAA CATGACCTGG ACAAAGAAGA ACAATAAACCA AGCCTGGCAA

50

27 (2) INFORMATION FOR SEQ ID NO: 2345:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2345:

36 GTATTGCGAT GATGCATACG GGTATTGTTG TGATTAATAA ATATTCATA TTTAATGTTG

60

40 ATAAATGTTG AATAAACAAAT CCGCAAAGNG CACTTGATGA TAGTGCTAAG A

111

41 (2) INFORMATION FOR SEQ ID NO: 2346:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2346:

51 GCAAACAGTT TCCGTGTCCG TTTTCCAATT AAGTTAAGGA ACCCAAAGAG A

51

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2347:

TCGTAGGTGC CATAACACAC GTTACCTGGG ACTCATATGA AGTATTATGT CGAGACGACC 60

15 (2) INFORMATION FOR SEQ ID NO: 2348:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2348:

GTTTTTAATA GGCTCTTAC GSTATCTAAA ATAATTGCAT TATTGGTGTG CCTTGATGTA 60

25 ATTGAATTAA AGTACCGTTT GGTTGTAACG TTTCAGGTAT ATCATTTCAC ACnATAAC 118

(2) INFORMATION FOR SEQ ID NO: 2349:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2349:

ATGACAGAAA GCAAAATCCC AATGTTGATA TACCGTTTT GACACCACTT GATTATCATT 60

40 ATTTTTCTT TAGCGATGGA TTTTATATTA CGATTCAAT TCTTACTATC GTTGCATTAT 120

TGTCATTCAA ACTGTATCGT TTTTACTnTT ATAGACTTT CGCAATAGTA ACATGG 176

(2) INFORMATION FOR SEQ ID NO: 2350:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 201 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2350:

5 CTACGACTGA CATTAACTGT GCAGATGTAC CTGGATTCTA TTTTTCAAG AACAAATTGT 120
 AATAATTGAT AGTTATATGG TGCAATGTCA CCTTCATCCA TTGAGCGCTC AATAATTCA 180
 GCTGChAGAG CGGCnTGACT G 201

(2) INFORMATION FOR SEQ ID NO: 2351:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2351:

20 ATCGCTATAA CCTATCAGTG ATAATATTTG ATTGCATGGT GCACCATTG AnATTCACT 60
 TAGAACGGTG GTACCTAATT GCTTATTTT ATATGTCATT TGAAGATTAA AAAATTAAAA 120
 ACTTTGATAAC AGAGTGAAC CATATTCAA CAAATTAC 158

25

(2) INFORMATION FOR SEQ ID NO: 2352:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2352:

35 TCGTAATCAA AACATTTGA ACAGGATTAT AGTAAGGGAA TTTTGGATT TIAACTTGTG 60
 TTTGGTCATT TTTTAATAAG AGTCGAGCTA AGTCTTGCAA CATCATTACT TGCTTGGCAT 120
 CTAACTGTTC GTCATTAAT TTTATGAAAC GATCACTCAT GTTTATCCC TCTTTAAAAG 180
 TTTAGTTCTA CAGCATTATA TATTGCTTGT TGTTCACGTT CATCTTCCAA TTTATCAATA 240
 ATTGTACGTT TAATTGCACG TTCAACTGGC ATTACAGTGA TTAAATCACA CAAGTCTAAT 300
 AATGCACGGG ATACTAGCGG CTTCTTCAGA AATTGTCCC TGCTTAGACA TAGTACGTAA 360
 ATCTTCATTG AAACCTnAAT AATTGGTTC GATTGGTTT 400

45

(2) INFORMATION FOR SEQ ID NO: 2353:

50

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2353:

ATTAATGGGG TTAAATAACA TTTTGACTGC GAAAGATTG TTCTTTTCAG GTAAATCATT	60
5 GATAGATGTA TATAGTCAAT TTGCTGGATT AGCTGAAATG ATAAATGTnT TTGCGAATGC	120
ACCATTT	127

(2) INFORMATION FOR SEQ ID NO: 2354:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 223 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2354:

20 ATCTCGCTGT TTTTATGAAA GAAAACtACA TTTTCGAGAG AATAAAAAGA TTTTTCTGAA	60
ATTTAATCTA TCAATTACAT TGATTTACTA ATATAATTAG AAAGTAAATT TTATTTGATC	120
25 AAAGTAAATG GGGGAAGTAC TGTGATAGAA AATAAGAAAA CAGTTGAAGA TACATATTCA	180.
ACAGGCGCAA TTGTTGATTc AATATCATCT TCAGTnCAAA Tgn	223

(2) INFORMATION FOR SEQ ID NO: 2355:

- 30 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2355:

35 ACACTTGTTc AAACACTCAC AATGATAAAG CATATTATCA GTATTGTAGT GTGTGGAAAA	60
40 TGACAGCCAT CTAAGGAGAA AAATGATGAA AAGAATATTG GTAGTATTtt TAATGTTAGC	120
AATTATATTG GCAGGTTGTT CTAATAAAGG TGAAAAGTAT CAAAAAGATA TTGATAAAAGT	180
45 GTACAAAGAA CAGAACtAAA TGAATAAAAT TGCCTCGAAA GTACAAAACA CTATTAAC	240
AGACATTAAA CAAGAAGACA GTAATACACA TGTTTATAAA GATGGTAAAG TCATTGTTAT	300
TGGTATTCAA TTATATAAAG nTCGTGAAA AATGTATTG TTTCGCATAT GAAnTAAAG	360
50 GTGGTTAAGG CCAGAGGATT TAATCAGnGG AAAnTAGACC	400

(2) INFORMATION FOR SEQ ID NO: 2356:

- 55 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2356:

AATTTACTTT	GTGCCACAAG	GTTATCAATG	TCTTTGAAC	CACCAAACAT	TCTAGCGATT	60
10 AAGTGACCTC	CATCATCGTC	TGGTAATCTA	TCCTCTCCCC	CCACAGTTCT	TTGTGCATGG	120
CTATTACGAT	CCCCATCTTT	TAGAGAGAGA	TTGTCTACAT	AAACTTCTTT	TATGCGACCT	180
15 TTATGATCGG	TTCGATATAT	GTGACCAGTA	GGTGGTGTGT	ATTCAATATT	CGCCTTTAGT	240
TTCTTAGGTn	CTAACGTCTG	GCATAGTGT	CTCCGAATTC	nAACCTTGTT	GTTAGTTGG	300
TGATTCAACA	TACTTTGAT	GGAATTCAATT	TnCATGGGCT	ACTT		344

20 (2) INFORMATION FOR SEQ ID NO: 2357:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear.

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2357:

30 TATGCGCCCC	TGCTTGATCT	TTCATTTGCG	TCCACTCAAT	TAGTTGTTTG	CGC	53
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(2) INFORMATION FOR SEQ ID NO: 2358:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2358:

45 ATTTTTTCAAC	CTTCTGAAAT	TGATAAAATCT	AGGTTATCGA	ATATAGTCTT	ATCGGCATAA	60
GATTTATTTA	AATGTTCAAT	TTTATATGCT	TCCATACCCA	TCTTCCTTCT	TCTGTTGAAA	120
TCTCTACGTA	CTTAAATCAG	TTCTATACAT	TATACACCTT	TTTGAAATCA	AAAGAAATCG	180
ATACCGTTAA	GTGTCATAAT	TTAATATATT	GTTGCTTCAA	CTATAAATAA	AACTTGTAA	240
50 GGCTTTGATG	ACTATGCTAA	TGATCTTTAT	AATATACCTT	TTTATCAACA	CATATAATGT	300
AAAACATAAT	ATAnAAGAAC	ATAATAAAAA	CCCGGATTGA	TATTTTATCA	ATCCGAGTTC	360
55 GTGTTTAGAT	ATTATTTTTT	AGAGTTTGCT	TTAGGTCTG			400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2359:

TTAATGTCGC CATTTTGT TAGGTAGACG TATAAAATCTG GACCTTTGTA TGATTGTAG 60

TTAGTAAGCA TTAATTACG ATTTTAATC TCAGCTTAC CTTCAACAGT TTCAACCCTTT 120

TTAGAACTGA ntGTACCTGT TAGGTGTTTT GTTT 154

(2) INFORMATION FOR SEQ ID NO: 2360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2360:

ATATGTCTTG TGATTTTCA GGTGTAAGTT AGTATGCAAG TGATTATGAT TGATAGT 57

(2) INFORMATION FOR SEQ ID NO: 2361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2361:

GGCATCAAAT TAGTAGGGAC TCACACGTGA TGCATCCTGT GTTTTGGATC TCATTTCT 58

(2) INFORMATION FOR SEQ ID NO: 2362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 30 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2362:

TGTTATTATC GnAGAGGCTT TTCGCTTTGG AATAAGGTAT TACGTGAATG 50

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2363:

CTCTTCTGGT CCCTGACATA CATAGGAGAA ATAGCnCCAT GTACAACGTG

50

(2) INFORMATION FOR SEQ ID NO: 2364:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2364: ...

25 ATTGCCAATG TCGTTAGTTC GTGAGGCTGT TGGTGAAAGT TGTGTTTGAA

50

(2) INFORMATION FOR SEQ ID NO: 2365:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 111 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2365:

CCATGATTAA AATCATTGAT TAATGGTGCT TGTTCTACAT CTGTGTAAAA TTCATACAAAT

60

TCTTTAGCAT CGTCCAATAG TTICATCACGA CGTTGGnTAA ATTCTTCTTC T

111

40

(2) INFORMATION FOR SEQ ID NO: 2366:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2366:

TAATGCTGAG CGTGTACTT TAGTTGGATC AACGATACCT TCTTCTAACCA TATTAACCCA

60

CTCnTTTGTAA GCAGCGTTAA AACCAACACC CGGCTCTGCG TTTTTCAAAC GTTCTACAAAT

120

55

(2) INFORMATION FOR SEQ ID NO: 2367:

- 5 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2367:

CCTGATTGCA AAGTACAGCA AGCACTACAG ACGCCTAAAnC ACTnACACTA

50

15 (2) INFORMATION FOR SEQ ID NO: 2368:

- 20 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 55 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2368:

26 AAAATGGTAT TGCAATTAGT AATGTTACAA CAAGTGTGT AATAGCTGCA TAAAT

55

(2) INFORMATION FOR SEQ ID NO: 2369:

- 30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 51 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2369:

TATAGGATGA AAATCCTGCC AAAAGATTAA GGGGTGGCCT AATGAACCAT G

51

40 (2) INFORMATION FOR SEQ ID NO: 2370:

- 45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 52 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2370:

51 TTGCTCGAGG TGGTAAATAC GCAAAGTTA TTTGGTTGTG CTAAGAGAGA AA

52

(2) INFORMATION FOR SEQ ID NO: 2371:

55

- 5
- (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2371:

10	TAATTTGAAT AAGGTGGAAG TGATAAACAG TGCTTGCAG ATCTAGAGTC ATTAATCAAA	60
	ACCCATA	66

(2) INFORMATION FOR SEQ ID NO: 2372:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2372:

25	AGACAGGTAC TGTCTACGG TATGGAGCAG AAGCGGGAAA GCTGCCAGA GCCAACTGTA	60
	GACAA	65

(2) INFORMATION FOR SEQ ID NO: 2373:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2373:

40	TTGCAGTGAC GGCTTATAAT CATTCCAAGC GAACAATTAG ACATTCCATA TAAAATATAC	60
	AGATGGCTTT CAGTAGAGTA GTGGATTCCGG ATTACCGAAC TATACTGGAA GCTTTTTATT	120
	ATAAAATGAAG AGAAGTTATA TTTTTAGCAT GTATAGTTGA ATACTGGGTT AAAATACCAT	180
45	ATTAATAATG AAGTAAAGGT ATGAGTGATT ATGAAAGTGT TTTGAATGAA ATATATTTAA	240
	TTGGTGATGC TTTTAATTGA AAAGATTAAC AGGATTCAAC TTGGTAAATT GTATTAATG	300
	TGAGAAAATA AAAGTATATT CATTGAGAGA TATATGAGTC AATGATCGTT TTAAACAAGA	360
50	TAAGTGTATT TTAATATGTA AAAGTTATGT AATAAATATT	400

(2) INFORMATION FOR SEQ ID NO: 2374:

- 55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 70 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2374:

CCTATCATGC CTCTCTCTCA CTGAATCCTT TAGATCCCCT TCCCTCCCTC TCCCCCCTCT 60

10 TTTCCCCCTCC 70

(2) INFORMATION FOR SEQ ID NO: 2375:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2375:

CCAAGTCAGA GCAGCAGTTC AGTTCGTCAG CnGTTCAgTT CAGAGCnGTC 50

25 (2) INFORMATION FOR SEQ ID NO: 2376:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2376:

35 GTGGGTGAAG CTGTTGCCGA nGGAGAAAGCG GGTATGGATC CTGACGGTGn 50

(2) INFORMATION FOR SEQ ID NO: 2377:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2377:

AATTGCAGGA CAGGTCAAAG GCAAATGCAC GTATTCAAGT CATGCTCATG TGCATGTTG 59

60 (2) INFORMATION FOR SEQ ID NO: 2378:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2378:

5 TTTATCATCG TATAAATCTA TATCTAATTG ATAAACTTC GGGTGCTTAA CTAACCTCTCT 60
 CAATACACTT ACACCAGCAG TTCCCATGCC TATTATTGCT ACACGCATAT ATCATCCATC 120
 CTTTTGTAAT TCAAAATATT ATATTTAAC TATTACCTAT AATTATAGCA ATTTGGTATT 180
 10 TCCAATAAAA TTTATnAAGG TAAGCnATTA TTTCACTTTC ACAACCATT 229

(2) INFORMATION FOR SEQ ID NO: 2379:

(i) SEQUENCE CHARACTERISTICS:

- 15 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2379:
 AGTTTTTGT TTGACGTATT TAATTTACTA TTTGCTTGAT TGATATTTTT AGACATTAAA 60

25 TAGTGTTCCTC CTAATCAATT TATTCTTCTT TATnTCAGCA TTATTCGCAC TGACAT 116

(2) INFORMATION FOR SEQ ID NO: 2380:

(i) SEQUENCE CHARACTERISTICS:

- 30 (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2380:
 CAAATCTTAG CGGATGATTG GCATGTATAT TCTGCTGGTA TCGAAAnCACG CGGTGTTAAT 60

40 CCCAAAGCGA TAGAAGCTAT GAACAGAACT CGGCGTTGAT ATGTCGAATC GTACGTCAGA 120

45 TTTAATCGAT AATAAT 136

(2) INFORMATION FOR SEQ ID NO: 2381:

(i) SEQUENCE CHARACTERISTICS:

- 50 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2381:

TTAATTGATA GCTTTATCT GTAGGAAAAG CTATTTAAA GATTCTAGT GTATCTATAA	120
CTTTTTGGG ACGATATTGA ATATTACAAT CTTAAATGC CTTTTAATA AAATTCAAAT	180
5 CAAATCTAC ATTATGAGCT ACAAAAATGC AATCTTTAT CTTATCGTAG ATTTCTTGTG	240
CAACTTGATT AAAATATGGC GCTTGTGTA GCATATTTTC TTCAATGGAT GTAACGCTT	300
10 GAATGAACGG CGGAATCTCT AAATTGTTCA TAATCATAGA ATGATATGTA TCAATAATTT	360
GGTTATTGCG CACAAACGTT ATACCAATTT GAATGATATC	400

(2) INFORMATION FOR SEQ ID NO: 2382:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TATTTTGTAA ATAAAGTTAA TATATGTTG TTGTACAGAT AGTTCAAGGAT ACA	53
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(2) INFORMATION FOR SEQ ID NO: 2383:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 CCCGAGCTTG CCCTCCCTCC CCCCTCTTCG CCTCCAGACG AAGTGCCCTT CTGTCCTTG	59
---	----

(2) INFORMATION FOR SEQ ID NO: 2384:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 AGCCAACATC CCnGATGGTA CTTGCATTA TGCAACCT AGAGAGAAGA ATGATGCCAA	60
50 TAAACCAAAT TGTGGTTTG TCATCCCTAA ATCATCCATC ATTTGCTTAG	110

(2) INFORMATION FOR SEQ ID NO: 2385:

- (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2385:

10 TGAAAGTTCT TTTATGCATC AATTTTAAnA CTACGAGCGG ACnCTAATAT 50

(2) INFORMATION FOR SEQ ID NO: 2386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 245 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2386:

GGCAATTAT TGACACAATG CTTGAGCnAT TGATAGCAGG ACAAGAAAGA ATACTTGATG 60

25 AGTTAACACC AAAAATGGAT GCGACTGAAA AATTAACGCT TTATTTAACT AGTCATTATA 120

AACAGATAGA TTATGAATTT TTGTATCTCC TTTCAATGGA TAAATTGTTT GGAAATAAAA 180

GAAATAGATT AACATTAATT GATTTAGAAA ACATATTGGG AGTAGGAAGA GTAAAAATTAA 240

30 GTnGT 245

(2) INFORMATION FOR SEQ ID NO: 2387:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2387:

CACAAAATTC GAAATCGTCA TCGGTGATAT GTTTAATACT TGGGAAAATA TAAAACGCGC 60

45 CTTCAGGTTG AGCGGTAATC TCAAAACCTA ATTTAGTTAA TTCAGATACT AAATAATTTC 120

TTCGTTChAC ATAAGCTTCG 140

(2) INFORMATION FOR SEQ ID NO: 2388:

50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2388:

ATATAACATT GTAGGGCCTA ATAATTATT TTATGTCTCA GACTCATACA ATGGTTATTT 60
 5 AACTTATTAA CCACAAATTG AGCACTAAGA CTCACTATTA TCGATTCTTC TATTGAACAn 120

(2) INFORMATION FOR SEQ ID NO: 2388:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2389:

TCTAAATCCA GCATGATCTA CATCAAAGCT GAATTCACCT TTTTCATCGA CTTGCAAATC 60
 20 AGGGAATTCT TGACCTTCAC CTAGT 85

(2) INFORMATION FOR SEQ ID NO: 2389:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2390:

GGTGTTTATA AAGCAGGGGC TGAGCCTCGG TCAGGACTGG ATACACAGGC AGTACGGGTG 60
 35 A 61

(2) INFORMATION FOR SEQ ID NO: 2390:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2391:

TAAAGTAACC ACTTTAGATG ACATTTAGA AGTTATGGGC CGAATGCAAA C 51

50 (2) INFORMATION FOR SEQ ID NO: 2391:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2392:

5 GGTGGGAnTC CCGGGTCGAC CCACGCGTCC GCATCAACCT AGnAGAAGCn

50

(2) INFORMATION FOR SEQ ID NO: 2393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2393:

ATTTCACAAAC GAATTGAAAA ACGGACGTAA ATTCTTAACt AAAGGCGATA AATGT

55

20 (2) INFORMATION FOR SEQ ID NO: 2394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2394:

ATAGGTTGCT ACTATTTATA TCGACTCATT TTCACCTACA AATATGACAT TGTCTCTAGA

60

ACACnAAAAT TAATTTGCGT CATATCTGCT ACAGTTTGGA GTGTGTTATC AAGTGTATTT

120

35 (2) INFORMATION FOR SEQ ID NO: 2395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2395:

TGGACCATAG TAAAGCATTa CGGTCGGTTT ATTATTTCT AAGGAAGTAT GTTTATATAA

60

ATCTATGCTC ATTTGTTTT TAGCGTCTGT TTGACCTATT ATTTTAGAAC CAGCCATCTG

120

50 CTCTTTATAA AAATTTATTA CATCATCTTT TTTTAATGTT GTATATTCAt AGTTTATTC

180

TATTATnTCA GAATCGTGAA AACTATTTAG TGATTGAnAT ACTCTTTTG GAGGATTCTG

240

AATATAGATT TTCTTAATAT T

261

55

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 104 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2396:

GTTCCTTGAATA TAGGGGCTTT TATCACTCTC CGAAGTCTnt TCTAAGTTAG ATTTGGAAAAA 60
TAACACTTTT TTAGTTTCAT TCAAGCGAGT CGAGTGACTC CAGA 104

(2) INFORMATION FOR SEQ ID NO: 2397:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2397:

GATTATCGAT CACAGTATGA TTTACGTAGC AATTCTGGT ACATATAACGC CTAT 54

(2) INFORMATION FOR SEQ ID NO: 2398:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2398:

GCTTCACCTT GAACTAGCAA ATAAGGATAA AACAAAGCATT CTTTACATGT TTCTTTTAAA 60

TACGTTGAT ATTTAATAA TACTTTTCG ATTTTACTCA TATAAGTTG AAGTTCTAAT 120

TTTCATTCT CACTTATTTT GTATATATTA CATTCATTAT GTTCTGTCAG AAAAATATAA 180

GGGTCAATAT TAATTCGTC TATCAATTCA TAAATTACAC TTAAGTATTt nTCT 235

(2) INFORMATION FOR SEQ ID NO: 2399:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 111 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

TTTGATGCAC TTATTTGTGT AATGACATCT TTACAGTCCTT TTCCCTCCCTC CATCATTTA 60
 ATAATTCCAT TTAGTTGCCC TTGTATTCTA TTAATACGAT TAATCATTAA 111

5 (2) INFORMATION FOR SEQ ID NO: 2400:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2400:

AAATGCTGGC TGAGTTTGG GCCACCCGCA AAGGCACTGG ACCGGTGCGA AACCC 54

(2) INFORMATION FOR SEQ ID NO: 2401:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2401:

AACCACTCAT CACTACTAAA ATGATACTTA AAAACAAAGT CTTAACACAC TTTTCATAAA 60

TATCAACTTC TTTCTATATT TAATACATTA ATTATACATC TTInThAAAT AAAAATATGT 120

GTAAAATTTT AAAACTTATT TAATTGATGT TTTAATAATG TATTATAGAA ATTATTGACA 180

TATGATTAAA AACCCCTTAGG ATAGT 205

35 (2) INFORMATION FOR SEQ ID NO: 2402:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2402:

AGATAATCAT AGAGAAAGTC CACAGTCGGT AGAGGTGGTA GCTGAAAACA ACATACTATT 60

50 AATTATGAAG TGCTTTGTAA CTTGTCGAGA CGTTTGCCGC GAATCTATCA TGATGGTGAT 120

CAACGTTTG ThACAAATGA 140

(2) INFORMATION FOR SEQ ID NO: 2403:

- 5
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2403:

10 ATTTAACAC TCCTCCAATG ATAAGATTGA AAGGCAAGAT GACCTTCCAA TCTTATTT 58

(2) INFORMATION FOR SEQ ID NO: 2404:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2404:

CAGCTTCTAC AATACGGCGT GCTATAGCAA GCATTAATGT AAATCCTAAT TCTGCAGTTG 60

25 T 61

(2) INFORMATION FOR SEQ ID NO: 2405:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2405:

AATAATCATT TTAATACGGT CTTCAGGAAT TGAAAGTGTCT ACAGGTACAT ATCCACATCC 60

TGCTTTAATG GGCACCAATC ATCCCAACAA TCATATATGG TGACATGTGA CCGAnTAAAA 120

40 TCATCGGGTT TCTnACTACC TTGTAATCGA TGTGGCTAAT TTACTAGACT CATCCATTAA 180

CTGTTGATAA GTTAATTCCA TCAGTTGTGT GTCTAAC 217

45 (2) INFORMATION FOR SEQ ID NO: 2406:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 228 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2406:

55

GTAGTATCCA ACGTATTCG GATTGCATCG AGTTGATTT TATTATTTTC TTCAATGCTA	120
TCAAGCGCAn CTGTATTACG TCTTACTTTA GGTTTTATTT GCTCTATTGC CTTGATTGTT	180
TGATnTCTAA CATCAGTAAC AGCAGCATCT TGATTGTAT TGTCTATT	228

(2) INFORMATION FOR SEQ ID NO: 2407:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 110 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2407:

CCTTCGTCT CGCGCGTTTC GGTGATGACG GTGAAAACCT CTGACACATG CAGCTCCGG	60
20 AGACGGTCAC AGCTTGTCTG TAAAGCGGAT GCCGGGnAGC AGACAGCGAT	110

(2) INFORMATION FOR SEQ ID NO: 2408:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2408:

GGAGACCCCA AAAATTTTGT CGTTGAAGAT GCCTTTTTT AAGCGTTATT TGGCTATATC	60
35 AGTTTCTAAC TGT	73

(2) INFORMATION FOR SEQ ID NO: 2409:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2409:

AAATCATTAG AGAGGAATAG TTCCCTTTGT TACGCCAAAG ATTGATATT GAC	53
50 (2) INFORMATION FOR SEQ ID NO: 2410:	

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2410:

CCATATGATT GTATAGGATC CATGACGTCT CCACTGACCC CTGACTCTAG TATC

54

(2) INFORMATION FOR SEQ ID NO: 2411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2411:

GTTCCCTCTTC AATTGTTATA TGTATATCAC AAAAATTATT TCATTATTTT ACCATTATTA

60

TTTTACAAAT ATTATCCCAA GAATACAATT CAAGAAATGA TTAACCTTAC TTTAGAATTG

120

TACCTTATTA CATTATTTAT GAAAGTACTC TCTCAATTAT AACnAAAAAG AAGGTGTTCA

180

ATACATnCAT ATTTAGTCTT ATAT

204

(2) INFORMATION FOR SEQ ID NO: 2412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2412:

CAGTGGCGCA GAAACATAAC GCTCAGGGAA GCACAGCACC TCATTATGCC AAAGCT

56

(2) INFORMATION FOR SEQ ID NO: 2413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2413:

TCGCTGGCGG GTCCCGCGCG CCTAGCGTGC TCATGTGCGG TGTCTAGGT GTTGGGTTG

60

CAGTCA

66

(2) INFORMATION FOR SEQ ID NO: 2414:

- 5
- (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2414:

10 GGATAGAAAT GGGATCCAC CCATCGGTGG GGGTACCAAGG CTCTTCATAT GGCCTTGTGG 60
ACTTC 65

(2) INFORMATION FOR SEQ ID NO: 2415:

- 15 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2415:

25 TTAAATAGAT AGAATAGAAT TAAAGAGACG ATGATAGGTG CTGCTATCGT CTTAAAAACG 60
ATGATAAAAAG GATCAAAAAC ATATGATACT TTTTCGAAAA TAAAAATAAC AATACCCAAC 120
AATACTAGCG CTATTAATGA GAAGACTAAA TCATTCCCAC CAACAAACTT CATATACCGT 180
30 GATTCTGGTAA ATTTCnnAAA ATTCTTTCTT ATATTCTTTT CATTTCATT CAATTATAGA 240
TTCACCACCA CTTAAAATAT TCATAAG 267

(2) INFORMATION FOR SEQ ID NO: 2416:

- 35 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2416:

45 TTAAACAAAT GAATATAGTA GTTCCATTAT CCTCACTTTT AATCGTTTAT 50
(2) INFORMATION FOR SEQ ID NO: 2417:

- 50 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 177 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

55

TTTGCTGGGA GTTGCATTA GAAAATATAAC ACATTTACTT GACATTCAAC TTGATAAAAAA 60
 ATTAGTTATT GCCATATGTT GCATCACATT TATAGGGATT TTAATATTTT ATGTACGCCT 120
 5 AATTAACAAA TCATCTTTAA ATATTTATAA TACTAAAAAT AAAAGGTCAA AAATnTT 177

(2) INFORMATION FOR SEQ ID NO: 2418:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2418:

AAAATGAAGC GGTCGCAAA TATAATGACG TGAAAGCATT TTATACTCAT GGACATTTAT 60
 20 ATCAAGTCAA TCGAACACAAGA GATTTATTAG CTGAAAAGG ACTTGAATTAA GGTTGTTGT 120
 TTGCAATTAA TGGACATACA CATGTGGCAA AATATGAGTA TATTAATGGT GTTCATGTTA 180
 TTAATCCTGG AAGTATATCT CAATCTAGAA GTTCAATGGA AGAAACATAT GCTGAAGTTA 240
 25 TTATTGATGA TCAAACCTTA CATGGCACCA TCAATTCAA AAATCGACAT CACGAAACAA 300
 TCAGTCATAC TACTTTTAA ATAGAAnTAG CTATGGCTTT TTTAGTTA TAGACTGATT 360
 TAACTAGGAG GTCGTGTCAT CCAATGTTG TTTAAAAGTA 400

30 (2) INFORMATION FOR SEQ ID NO: 2419:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2419:

AGGGTGCCGA GTTAACCAAG AAAGGCCGTT GGTTGCCCG GGTATTTCC CCC 53

45 (2) INFORMATION FOR SEQ ID NO: 2420:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2420:

(2) INFORMATION FOR SEQ ID NO: 2421:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2421:

ACCAGAACAGAC AATAAGTGTA ATGATGCCTG TTCTAATACA GAATCTTAC TTTTTATTGC	60
CTTTTCAAGT CGTTGTTCCA CTTTCTTAAT TTCATTGTTTC ATGTTTAACT TTGCCAnGTT	120
AATCACCTTT GGTATTATCT TTTTCTTTAT AG	152

15 (2) INFORMATION FOR SEQ ID NO: 2422:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 307 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2422:

GTACGTTTTC ATTAGTTGTT ATATTCAT CTTGATAATT TTTTAAATCT TTAAAATCAG	60
CATACTGACT AAAAAATTAA AAATTTCAA TTTTTGTnT AAGTTTTTGT CTTCTACATT	120
ATCCAAAAGA ACAATCTnAT TATTTTTTAG TTCAACACGA TATTTTTCT CATTATGATT	180
TTTGCTAATA TCATCATAAA CTTTATTTAC AAAATAATAA CCTGTTGCCT TTTTGGTATT	240
TCTATTAAGA TATAACACCA TGCCTTCATC ATCTAATACT CCTGGTTTGT TACTTTTGA	300
AAAACCCn	307

30 (2) INFORMATION FOR SEQ ID NO: 2423:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2423:

ATTGTGTTGT ATTTAGACA AGACCTTCAA TTTTGGAGAT TTCACGATT ACCACC	56
---	----

45 (2) INFORMATION FOR SEQ ID NO: 2424:

- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2424:

10 AGTCCTTGG ATCGTCAAGA TITCACACAT TTACANTTAT TAACTCGTGA

50

(2) INFORMATION FOR SEQ ID NO: 2425:

15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 248 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

ACTIVITÉS AGROFORESTIÈRES EN MÉTROPOLIS : CONSTATS, PROBLÈMES, PERSPECTIVES

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CATGTCACTT TCTGAAATT TTATCGTTCCT AGTAGGATCA GAATCATTTA TTTTGCTTAT

120

ACGTCTTTG CTTATTGTTG TAATTCGCTGA TATATTAACG TATGTATCTT TCCCTTTGTC

180

CTTGGAAATAA ACACCTATCA CTCTATACAG TTCAATTAGCT TTTTGAACTTA AGTTAGACAA

240

AAGCTTTT

248

(2) INFORMATION FOR SEQ ID NO: 2426:

35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 53 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2426:

CCTTATTATA TGACAGGTTG CCTAAACAAG TGCCCTAGAGA AAAAAACTAGC CCC

53

(2) INFORMATION FOR SEO ID NO: 2427:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 173 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2427:

55

TATCCACTAA AATGATTTCGC GCGTATTGTA ATATTAATCG TTCTACTTTT TATGATTATT 120
 ACAGGGAGCA ATTGATTAA TTGGATACCA TCAACTChAA GCATAGGTGG AGG 173

5 (2) INFORMATION FOR SEQ ID NO: 2428:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2428:

TACTTATGTT TATGTCGCAA TAATTAATGT TCGAnTTAGT GGAATTGAAC 50

(2) INFORMATION FOR SEQ ID NO: 2429:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2429:

AGTCATCATA TTATCAATAA TACGCCGCGT TAAATCTGAT AAATTCAATAT AGTCTGTATC 60
 30 TAACTCTG 68

(2) INFORMATION FOR SEQ ID NO: 2430:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2430:

TGAATTGAAA ACGGTCGGTG AAGCGCTAAA AGGTAGACGT GAAAGGTTAG GAATGACITTT 60
 45 AACAGAAATTAA GAGCAACGTA CTGGAATTAA ACGTGAAATG CTAGTCATA TTGAAAATAA 120
 TGAATTGAT CAACTACCGA ATAAAAATTA CAGCGAAGGA TTTATTAGAA AATATGCAAG 180
 CGTAGTAAAT ATTGAACCTA ACCAATTAA TCAAGCTCAT CAAGATGAAA TTCCATCGAA 240
 50 CCAAGCCGAA TGGGACGAAG TAATTACAGT TTTChATAAT AATAAAGACT TAGATTATAA 300
 GAGTAAATCC AAAGAGCCAA TACnATTATT AGTAATCATG GGnATTACAG TTTTAATAAC 360

(2) INFORMATION FOR SEQ ID NO: 2431:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2431:

TGACTTCGTC CAAGTACAAC TGCAGTCAGT ACCTACGAAA TCAAGATCAG CATGGAT

57

15 (2) INFORMATION FOR SEQ ID NO: 2432:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 225 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2432:

ATTCTTAATC GCATCATAAT TAATTAACGG ACGCATAACA AATCCGATAAA TACTATTATC

60

TTTCCAAGTC ACTGACACTC CAAATTGATT TGCTTCnTCT ATCCATATTT GCTCAATAGT

120

ACCATCATTT TGAGTACACA CTTTTAATTCA ATGTACATCA GACTGCCCTTG TATAAGATTT

180

30 GAAAAGTTTC CTAAACTGCC AATAACTGnA CTCTCGCTTC AAATT

225

40 (2) INFORMATION FOR SEQ ID NO: 2433:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2433:

CGGCCTGACG TTACATTTCT TCAACTTCAC GTCAAAATTG CTTCGCAATA ACCAGGA

57

50 (2) INFORMATION FOR SEQ ID NO: 2434:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TTAACGTGT CTTTAATGTG GAAAGTTGAAA TATTAGTCG TAAAAAATG AAACCTAAAAA 60
 AAAATAATA TTTATATTTG TCGTACAAAG ATGAAAGCGA nAGA 104

5 (2) INFORMATION FOR SEQ ID NO: 2435:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2435:

TTTGCTAACATC GTTTCACGGA TTGTGGGGAT GGGTAAAGAC TTTGCTAGTG G 51

(2) INFORMATION FOR SEQ ID NO: 2436:

- 20 (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 140 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2436:

30 AAAnTTAATT TTGGGGGGC CCTTTTTTAA CCGGAAAATC CAATCGGGC TTTTAAGGAA 60
 TGGTTTTGGT TAACAGGCTT TCGAATTGTTG TTTGGCAAAA CAATCCTTGG TTTGGGTTT 120
 CGGTCCGGAG GGTCTTAATT 140

35 (2) INFORMATION FOR SEQ ID NO: 2437:

- 40 (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2437:

45 GAAGCGGAAC CACCGTTGTT TTTCTTTCA GGTCCAATTG AATAATGTT ATGAATAGAA 60
 TGGATAAAAA TATAATTATT TAAGTGTAA AGTAAACCAA ATCATGATT AAGATTATAA 120
 50 GAAAGAAAAA TTGACTAATG TIAAAACCAA CAATCATATG GGTGTAACG TTTATACAAT 180
 CATCGTAAAAA CTCAATATGC TTAATTATT CAAAATGTC GTCAATAAGT ACAATGAAAA 240
 GGAGATTGAT TTTTGAATAA AAAATATCTT ATGATTGTAAT TATAATTAA AATATGATTC 300

AAGATACGAT TTTGAGACCA TGTGAAGGGA TTAAATATAG

400

(2) INFORMATION FOR SEQ ID NO: 2438:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2438:

TCTGTTTGA AAGTTGCAGT TTGGACAGCA CCCGATGATT AGGTGAGTCT TTTGGTTA

59

(2) INFORMATION FOR SEQ ID NO: 2439:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2439:

TTGGTnAACCGTTACAGTT GCAAGTTTG AAGTGAGTTA TTTTTGGTT

50

(2) INFORMATION FOR SEQ ID NO: 2440:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2440:

ATTAaaaATA AATTAAAAnGT TCCAGAACCA GTTAACCAGA ATATTTACGA

50

(2) INFORMATION FOR SEQ ID NO: 2441:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2441:

TGCTGTTTGTG GCGGTTTTTC TCCGTTGGT TGAGTATGTG GTGTACCTTT TGTC

54

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- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2442:

GTTGTTGGGT GTGTGGTTTT GGGTGTGTG GGTTTGGGGT CTGGGTTCGT TGGTGG 56

15 (2) INFORMATION FOR SEQ ID NO: 2443:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2443:

GAGACAAACT AGTCGTCCAG AACGGAATT AAGTAATCAT AAAAATTACG GAAGTGCAC	60
25 TTTGTTTTTG ATTTATCATT GATGGAAATT AGAACAAATT ATCGAATGAT ATTAAAATTA	120
CATAACATCA TGTTGAATGT GAAATTAGGA TTGAACATTA CCTGTnTATT TGAAAAACCT	180
30 TCAGTTTTTA AATCACTAGT ATCACAAATA AAGCGACTTA AATTGCGATTC GTTAATAATA	240
GATAATGCAA ATTTAAGTAG CCCT	264

20 (2) INFORMATION FOR SEQ ID NO: 2444:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2444:

CCGTCTTTAG TACGTACGTT GTTTGCGGGG CTTGGGGTGC TTTCTGGGTG TTGGTCATTG	60
45 TATTGGG	67

45 (2) INFORMATION FOR SEQ ID NO: 2445:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2445:

AGCTGCATTT CTCGTGCAGG CTATCAGCAT CGATATCTGT ACCATTTAGT GATCATGC

58

5 (2) INFORMATION FOR SEQ ID NO: 2446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2446:

AACCAAAACA AACATTTGTT CGTTAAAATA TTGACACAGA ACATAAGTTC TGA

53

(2) INFORMATION FOR SEQ ID NO: 2447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2447:

CACAAATTAC ACCCATTGTT AnTACTAATA CTTnCCTnTT CATTGTTTA

50

30 (2) INFORMATION FOR SEQ ID NO: 2448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 75 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2448:

GCACAAACCA AACGCACCTT AACTGCTTTA AATGGCTGGA CGGGGGGTCA ACTGGCCTTA

60

ATGACACTTG AATCG

75

45 (2) INFORMATION FOR SEQ ID NO: 2449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 71 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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GCAGCCTTCA AGTGTGCT ATTTGCTTG GTGTCACAAG CCATTATCTA CGGTCCCCGA 60
 5 ATTTAGCCCG C 71

(2) INFORMATION FOR SEQ ID NO: 2450:

- (i) SEQUENCE CHARACTERISTICS:
 10 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2450:

TGGCGTGAGG AAAATATCA TGTATTGTTA CACAGTCAAC AGTCTTACCA AATGATAAGG 60
 20 AATGCTTAA AAACGGATTT ATCACTTCAT CAAGTCAAC AAATGATTGA TGTTGCTTG 120
 TTAATTGAAC CGGGTATAGG AAGTGTATGT AATGCTTTG ATCATATGTG GGGATATTTA 180
 AAAAATGTG CGAATGAAGA AGGAAAGACA ACAATCAAAA CTACTTAAAAA GCTGATTTTA 240
 25 TTTAATGGnA AAAATCGACA CCCCAACTTT ATTAGATTT TTAGCAGAAC TTGCCTAATA 300
 AATATGGnG TCAATATTTA CTACAAAGCC GnGTTTTAA ACCCCAAAAA G 351

(2) INFORMATION FOR SEQ ID NO: 2451:

- (i) SEQUENCE CHARACTERISTICS:
 30 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2451:

GTTGACCGCC TCGGCTGGCG TTCGCGGTGG GTGGTGGGT CGGTGCGTGT CTGG 54

40 (2) INFORMATION FOR SEQ ID NO: 2452:

- (i) SEQUENCE CHARACTERISTICS:
 45 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2452:

TGCCATTCCA ATGTTACCAT CGTCTTGGTA CTACTATATA CTGCGGCTAT 50

(2) INFORMATION FOR SEQ ID NO: 2453:

- 5
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2453:

10	AGACGTGTTT CCACGGTATG GGATAAAATGA AGCACCGACT GATAAAATCAA TATAGCCTCG	60
	TGTTTTTAGT TTACCCGAAC TATCCCTTGA TAATGATTGT GACATCTGCG GATAATATTT	120
	CATTTTCTTA GATATCGTCG AAATATCACC GATTACTTGA AGTCCCATCTG TCGTAAACAA	180
15	TTCAATTCTG CTTTGTGTTGT TTTTACTTGG GGC GTATGTC ACTTCGGCAA TATATCGTCT	240
	AACTTCAGGT GTCATTCAG ATAACGCCTT AATCATATCA TCTTCTTTTG TACCTTTGAA	300
	ACCATCCATG ACAGGTGCAT CATTAATTIT GACATCATTT GAACCTTTAA GCAATTACCC	360
20	ATTTTCTAAT AAAGGTAAT ATTACCTTAT ATATTCACT	400

(2) INFORMATION FOR SEQ ID NO: 2454:

- 25
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2454:

	AGAAAGAAAT ACCATTTGGA GATAGAGACT CGTGTATTT CTTAGCGATG GGAGATTTTT	60
35	ATAATAAAAAGA AGATAGnAAG AAAATTATCA AAGGTTATGA AAATAATTAT GGTAGAGGTA	120
	TTAACATATTCC TCGAGCACAT AGTATATATT TATATG	156

(2) INFORMATION FOR SEQ ID NO: 2455:

- 40
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 77 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2455:

	ACTTAGGTGA TATGAAATGT GGTCCCGCAGAC GATCGTCAGT AACAAAATAA CAGGCAGTCA	60
50	TTGGATTATG TTTAACG	77

(2) INFORMATION FOR SEQ ID NO: 2456:

55

- (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2456:

10 AGTGAATCG CTAAGAAAAA AGATGGAACC TCGGTATCTA ATACACAAC TCTTGAACGT 60

TTITA 65

(2) INFORMATION FOR SEQ ID NO: 2457:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2457:

25 TATCAATAAT TGCCACTTGC AATGACTGAT TAATTTGAGG TGACACATAAG CCAG 54

(2) INFORMATION FOR SEQ ID NO: 2458:

(i) SEQUENCE CHARACTERISTICS:

- (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2458:

AATTTTATTT CGAGATTCTT CAATATAGAT GTTTCTTCAT TAATTTGATT CTCTAACTCT 60

TGCTTACTAC CTAATAGTTT ATCTAATTCA GCTTTAGCTT TTTCATTITTC TTTAATTATA 120

TTAATTCAT TATTATGTT CGTnATCGTA TTATTTAGTT CGATAA 166

(2) INFORMATION FOR SEQ ID NO: 2459:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2459:

CCAATGATTA AGCAATACAA TCGTCACTAA ATTACACCG ATAATCTGAA TCATCGTCAT 60

(2) INFORMATION FOR SEQ ID NO: 2460:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2460:

AAATCAAAAA AATGTATAAT GAAAAGAAAA AGAAATTGG AAAAAATTGG GAAGACGCTC	60
15 AAAAAGCTGG AAAAGCTGTA GGTGAAGATT TGAGTGThAA TGG	103

(2) INFORMATION FOR SEQ ID NO: 2461:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2461:

TTTATATCAG AATAGAATAG TAAACTAAGG CATTGGAGA ACTTATTCCA TG	52
--	----

30 (2) INFORMATION FOR SEQ ID NO: 2462:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2462:

40 CAGCAGCGAA TTTTGACGT CCAGTGTAGA ATGGATGTGA ATCAGATGAA ATATCTAAC	60
GAATAACTGG GTATTCTTTT CCATCTTCCC ACTCCATCAT TTCTGAAGAn GTT	113

(2) INFORMATION FOR SEQ ID NO: 2463:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2463:

CTAACATAAT TGTTAACACT AAAATATTAA CTACTTTAG AACTGTGCGA TTAAATACAA 120
 TTGTCAGTAT TGTTATGACT AGGCTAACGA TACATAAAAT AAAGAAACCG TTAAAGACTA 180
 5 AAATTAAGCG ATCGATTCCCT TGTTGTAAT CATTGATATT ACCCAAATTAA ATAnTTAATT 240
 GGATGCATTT nCCAA 255

(2) INFORMATION FOR SEQ ID NO: 2464:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2464:

20 TATGCGACAA TTCGAAACAT TTTATATGCA AAAGGTTATA CAACAGAGAA TGTTGATT 58

(2) INFORMATION FOR SEQ ID NO: 2465:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2465:

30 TGAATTTCAT TACCACATAT CGGACATTGA TCTCCAATAT TTACAGCAGA TTTAATTCA 60

35 CTTAT 65

(2) INFORMATION FOR SEQ ID NO: 2466:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2466:

45 CGTGACCTTC AAAGACCGAA CGAGAGAGTT GAAGAGCATT TGCAGAGGCC A 51

(2) INFORMATION FOR SEQ ID NO: 2467:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2467:

AGTTTGTAA GTTTAGTTT ACTAACTTTT CCATTAGATA TTATTAATGA AAAAC

55

5 (2) INFORMATION FOR SEQ ID NO: 2468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2468:

TTGTTGGTAA GGCACCTCTT AAATATCAAC AACGCGATGA TATTTTCATT GGTACAAAAG

60

TAGGCAATCG TTTAAC

76

20 (2) INFORMATION FOR SEQ ID NO: 2469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 71 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2469:

CTTCTATAAT AAAACCATCT GCAATTAAGT CTTCAATAGA CGATGGATTCTTATGTA

60

TCAATGCATA C

71

35 (2) INFORMATION FOR SEQ ID NO: 2470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2470:

CTTCGTCATT GTATTCGAGC GCCTGTATACTTGCTCAAA TGATGCATAA AT

52

(2) INFORMATION FOR SEQ ID NO: 2471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

50

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2471:

5 AGAGGTTATG TTGATGTGCT TTATTTCAT CAATGTCATT AACACAATCA TATTCTTCT 60
 GTTAATGCAC TGTATTATAT TCAAACGCGC TATCGACAAT TAATTGn 108

(2) INFORMATION FOR SEQ ID NO: 2472:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2472:

20 GTCCCCAGTT GATATAGGAT CACAGTTAA TATACTGGT GAGATAGTAA TACTATTATT 60
 AATTCAAATA GGTGGTCTGG GTATCGTGAC CGTAACCCCTA TTGACACTAG TATTTTTAAA 120
 TAGAAAGATA TCAATGAAAA ATAGATTCTT GATTATGGTT ACATGGAATA TTGACGAACC 180
 25 TGGTGGTGTGTT ATTAAGCTAA TTAAACACTT GGCTATTTAT AGTTTAGTCA CTGAATTAAT 240
 TGGTATGATT TGTTTGTGTT TATCTTTAT ACCAAAATTT GGTATAGGCA AAGGTTTATT 300
 TTTAAGCTTA TTCACATCAG TATCAGCTTT TAATAATGCT GGGATTTGCC CTTTTTAAGA 360
 30 ATAACCTTAAT AGATTATTCT AGTGATCCAA TTGTCATTAT 400

(2) INFORMATION FOR SEQ ID NO: 2473:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 147 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2473:

CTTCAAATAC TAAATCAGCG TTGCTAAACA TACCGTATAC ATTTGATGGC GTTGATAACG 60
 CGTCCTGCGC TTCTGTTAAT AACTTTTCAG TTTCAGCATC TAAAnATATGA GGACGTTTTT 120
 45 CATTAATCAA CTTCAAATCA AATGCGA 147

(2) INFORMATION FOR SEQ ID NO: 2474:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2474:

5 CTTTAGGTGC TTGTGGTAAT TCTAATTACAC AAGATCAAGG TAACAAAACT GAACAAAAAA 60
CA 62

(2) INFORMATION FOR SEQ ID NO: 2475:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2475:

20 CCTTTAAAAT CATCTAGAAT ATCTCTTGAG AAAAATTGCA AATCTACAGT 50

(2) INFORMATION FOR SEQ ID NO: 2476:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2476:

35 ATAGTGGTTA GTCAATGTAA TTAAATGAGA ATAGAATGGT GATTCATCT TAGCTTGATA 60

ATTAGCAGAA TCTTTAAAGA AAATTTGTC TTnCAAGCCT AAGTTTACAA CGT 113

(2) INFORMATION FOR SEQ ID NO: 2477:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2477:

CGTAACTAAC TCAATTACT GAAAAAAATCG CTTGCGATGC AATAGCATTG 51

(2) INFORMATION FOR SEQ ID NO: 2478:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2478:

TAGTTGCCGC TACGTTTATA CTCGTATTA TGAAAAAAAC TAGCAAAGAA TCTAAAAAAG

60

(2) INFORMATION FOR SEQ ID NO: 2479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2479:

TCGGACATGA TGGTAAAACC GTATTGGGTA TTCGCACTGA CACCTTAAGG GA

52

(2) INFORMATION FOR SEQ ID NO: 2480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2480:

TTCCTAATTA AGGATTTAAA AGGGTTTCCT AATTAGATTA AAATTCCGGG ACCTGGATGG

60

AAAAAAAGTTT TTAACTTTTC CATCTGGTCC CGTTTTTGGA TTTTCGATAT AAAAAAAAGCG

120

CAATTATCTC TAT

133

(2) INFORMATION FOR SEQ ID NO: 2481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2481:

AAATGTTTG GAAGAACGTA AGAAAATCA ATCTGAAACA AATGCACGAT ATGAAGAAGA

60

ACAAGAAAAAT TTAATGGAGC TTTTAGAAAA TATATCAAAT GAGATTTCTG AAGCTCAAGA

120

TACTTATAAG TCTCTGAAAA GTAAACAAAA AGAACTCAAT GCTGTCATTC GTGAACCTGA

180

AGAACAACTA TATGTTTCAG ACGAACGACA TGATGAAAAA TTGGAAGAAA TTAAAAACGA

240

TACTATAGAA GAGAATGAGG CTAACCAATC CAGACAGGTT CTCGTTAGTT GGAGTTTGAA 360
 GCCATTGAAA GTATTCnGGG GGCCAATTAA AACCGCCAAA 400

5 (2) INFORMATION FOR SEQ ID NO: 2482:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2482:

AAGGTGCATA GTCAACAACA TTTACAGCAT CATTGATTTC TGAACTAACCC GAAACATTAT 60
 ACTTACCG 68

20 (2) INFORMATION FOR SEQ ID NO: 2483:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2483:

ATGAGCCnAC ACAGTGGTGA GGTAATCAAC GGTACAGTGG TTAGTGTGAT 50

(2) INFORMATION FOR SEQ ID NO: 2484:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2484:

CGGAACCTCGT CGAATAACTT TTAGATTCT TCGTTAGCTT TTACATTAGC GAATGCTTCT 60
 45 nTGATTGCTT TGTATTCTTC GCTTTCTCTT AAAGCTTGTGTT CTAATTGATT TGCATAATCA 120
 TATAAAATTAA CTGCCATGGT TATAGCACTC CTTGGTnGTG ATGTTTATTA AAACGTTCGA 180
 TATTACTTTA CCACATCTCG CTTTTTTAGA CAA 213

50 (2) INFORMATION FOR SEQ ID NO: 2485:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 376 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2485:
 GACCAAAATT ATCTTTAGCA CTTATAGGTA TCTTTTAAT ACTTTGTGAG TTTTCTATG 60
 10 GCATTCCTTT TTTAGGTGCA ACGTTTATT TTAAAGTTTG ATGGCAGCCT TTACTCTTA 120
 ATGCATTACT TTATCTAATT CTTACTATTA TATTATTAGT GAATAGACAA AATGCGATTA 180
 GACCTATAGC GATTATTCCA ATATTTGGTA TAGTAGGTAG TTTTTAGCT ATTATCCCCT 240
 15 TCTTAGGAAT TTTGATTCAT TGGATTTAT TTTTCCTAAT GATTCCAnTT GTCCTAGTTG 300
 GATTATCAGC GCCAACCTAT ATACCCAATA AAAATGCTCG TgNCnTTTA CACACAAATAC 360
 AAAGATGGAC CTAGAG 376

20 (2) INFORMATION FOR SEQ ID NO: 2486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2486:

TTGACCTTGA CGGAAACTTT TTTCCAAGTT CTAAAAGTGG GCCAAAAATCT T

51

(2) INFORMATION FOR SEQ ID NO: 2487:

35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2487:

GAATTTGGC ATACACATACTCTTAAAG ATATTATTGAAATTACAGGT GTAACTAAAA

60

GAACTTTACA TTATTACGAT GAAATAGGAT TATTAGTTCC AGn

103

(2) INFORMATION FOR SEO ID NO: 2488:

50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 106 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2488:

AATTACATTA GCACCAATCC ACACATCATT TTTAATTGTT GTACGGCTAG GTTGGTCATT	60
5 AAAGTCTATA AACGTTInCT TTAAGTTAAA TGGATTATTA TTTAGA	106

(2) INFORMATION FOR SEQ ID NO: 2489:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2489:

TGAATTGCT TGAGTCGTGC TGCTGATAAC AATAAAATTG CACATGGATA AAGAATGACG	60
20 C	61

(2) INFORMATION FOR SEQ ID NO: 2490:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2490:

GCTCGTATGA TACAAATTCA TAATCTGAAA CTTCTGTCGT TTGTCGAACA TGTGGTAACC	60
35 AATTCTTCAA GATGCTGTAT ATTTCTGCGT AATTTTCGTC ATTCCTGAAT AACCTCAACT	120
TTAAAATGTC ACCTTGTTG ATATAACGCA TTAAAAAAATA TTGATCTATA TCTCCCTTAT	180
CTTTAAGATG TTTTACAAAT GGATACAAAT TGTGGATGAT AAATGTATCT TGCATGGCT	240
40 TATCGATATG AATATGTAAT GCAAACCAAGT CTTTGTCAATA TTCAATATCT GTATTTTAT	300
ATTTTGGAAT TTCGATTCG GGTCTCGAT AAGATGATT TTTATAAATT GGTGTAACAA	360
TTTCATACAC ATGATCATTC TTTGATTGAG GGAAAAATGA	400

45 (2) INFORMATION FOR SEQ ID NO: 2491:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GACTGTTTA TCGCAACTAT TTACACCTAT ATTATCGTTA GTAGGACATC TCGTCGG

57

(2) INFORMATION FOR SEQ ID NO: 2492:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2492:

CATTGAACTT GCTTTGACG TACACCAAGTA ATCAAATGCCA TAATACGATC CGG

53

(2) INFORMATION FOR SEQ ID NO: 2493:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2493:

AATAACAACTA ACATACACATT ACCCATGTCC GAAGTCCnTG TTGAGGAATG

50

(2) INFORMATION FOR SEQ ID NO: 2494:

30

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2494:

GCTGTTAGC TTGCTCAAAT GATGCATAAA TATCTGATGC AACTATCATA TCAGCTAGTT

60

CATCA

65

(2) INFORMATION FOR SEQ ID NO: 2495:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2495:

55

ATTAAGCTTT CAAATCATT GATGTTAGGA GCTAATGTGC TCGATAAGCA GAGTAAAGAA	120
GAATTGCTTA AACAGCTAA ACATATAACA GGTTAGAAA ATCCTAATAG TCCTACACAG	180
5 TTATnGGCTT GGTTAAAGGA TGAACAAGGA TTAGATATAC CTAATTTACA AAAGAAAACG	240
GTTCAGGAGT ACTTAAAAGA AGCAACAGGA AAAGCTAnAA AAATGCTAGA AATTAGATnG	300
10 CAAATGTCTA AAACCACTGT GA	322

(2) INFORMATION FOR SEQ ID NO: 2496:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 59 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2496:

ATCAGTGTAA ATTGCACGG AATTTCTTC CATTAAACTA ATCCGATCAT ATAATGGAT	59
--	----

(2) INFORMATION FOR SEQ ID NO: 2497:

- 25 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 126 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2497:

35 CTAATTAAGC CAAAGGGGA AGGGTCCACC AACCCCTTGGT TTCCCCCAT TGCCCCGGAAA	60
CCACCAGnAA GTTTAAAGCT TCCCTTTAAG CCGTCCGATG GGTAGTCCGA ACTTTACCGT	120
TCCCAGC	126

40 (2) INFORMATION FOR SEQ ID NO: 2498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2498:

CACTTTGCGC CAGTTTCAG TTGAGTGGCA TAGAGTCTGC TCATCAGTTC CTTGCTCC	58
--	----

(2) INFORMATION FOR SEQ ID NO: 2499:

- 5
- (A) LENGTH: 90 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2499:

10 TCATGATGCA GACGCAACAG CATTGGTTA TGAATATGGA CAAATACCAAC AGATGCCGGT 60
 AGCATTCAA TCAAGTAAAC CTTTAATAGA 90

(2) INFORMATION FOR SEQ ID NO: 2500:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2500:

25 TGCTCAAAGT CGTAGACA GCCAACTAAT GCATTTCAA GATCAGTGAC ATCTCCGACA 60
 CCAAAGAAAT CACCGAATAT TTTTGCATGT TCGATTTAAC CTCGTTAAC ATCAAACCTTA 120
 ATTTGTACAA ATCCTTTTC AAATTTTCC TCGCGTTCAA AGTTATATTT AGGGTTTCTA 180
 30 CCATAATTCC ATTCCAAGT TCTATATTG TCGTTACTTA ACTTTCAAT ATTnTCCCAA 240
 TCTTCATCCG TTAATTGATA TTCTTnACT TCAGTTTCGC CAAAGATAGT TT 292

(2) INFORMATION FOR SEQ ID NO: 2501:

- 35
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2501:

45 GGTGTGTGTA GAGGTCGAGA GTTGGGGGG GAGTAACGTG GAAGTTGCCG GGACAGCA 58

(2) INFORMATION FOR SEQ ID NO: 2502:

- 55
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

ATACGGGAGG TATCAGCACG TACGTGCAGT CGGTAATGGA TChAAATACG

50

(2) INFORMATION FOR SEQ ID NO: 2503:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2503:

15	ATCCCCACTC TTTTTAAAT GATTAAACCA TATTTTATTT TTAAAATAAA TATCCATCAA	60
	AGTGTATCAA TAAATTTATC ACATGTCAGA AAGTATGCTT CATCTGAATA CACCAATACT	120
	CTCATGAAAC TTATTTAAAAA TTACTCTCTC AACGTAAAAn ACCATTCAAA TTCATGAATG	180
20	GTTTGGAAAGA ATGATTCAATT GTTACGCTAT TTAATCACTA CATCTTAATT ATTGGTGCTC	240
	TAAACGATTA CGCTTACCAT TTAAGAAAGC ATAAACGAGA CCTACAAAAA TACCGCCACC	300
	GACAAAGTTA CCTAAGAAAG CAAAAACGAT ATTTTTTAAA ACGTGTAAACC ATGAAACTGC	360
25	ATCAAGGGTA AAGAATACCA TACCTGCATA TAGACCTGCA	400

(2) INFORMATION FOR SEQ ID NO: 2504:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 355 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2504:

40	ATTATCTATG AATAAAATTT ATAATAAACCA TATATTGAGA AATTCTCTAA TACCTATTAT	60
	TACATTTTTA GGTGCTGATA TTGTAAGTAT TTTAGGTGGA GCCGTGATTAA CGGAGACTAT	120
	CTTTTCATAT AACGGTATCG GTAAATTATT TTTAGAATCG GTAATAGGCC AAGACTATCC	180
	ATTAATGATG GCATTAACGT TATTTTTCTC ATTITTAGGT TTACTGGGTA ATTTGATTTC	240
45	TGATATTACT TATGGATTAA TAGATCCAAG AATTAGAAGT AACTAGGGGG GATTAGAATG	300
	CAAATAAGT CAAAATGCC TTTnAAAATT GCATTTCTA AAItnATTCA TANTA	355

(2) INFORMATION FOR SEQ ID NO: 2505:

50

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2505:

5	CCGTTAGTTC CATAACCATAT TTTTTCTAT AAAATAATT AACATCTAAT TGCCTTTCTA	60
	ATTTTTCAAT AGGGTAGAT ACAGTTGACT GTGAATAGTT AAGTAACCTCT GATGCTTCTAG	120
	TAAGGTTCTT TGTTTCACTA GTTACTAAAA ATGATTTAA AATGTTTAAG TTCAAAGTAG	180
10	TACCTCCTT AGGGTCCCT TTTATCGAAT CCTGAATTCT AAGAATTCTG ATTTAATAAT	240
	AATATATAn ATAT	254

(2) INFORMATION FOR SEQ ID NO: 2506:

- 15 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20	AACTCCACCG TGTAGTTGCG CTTCATCGCC TTGAGGATGC GATTGGCGCC GTGCTGCGCG	60
25	GCACGTGCAG ATAGTGCAG CACTTGGCA GATCGCGCAC CGCCTCCAGC AGGTCGTCGG	120
	TCATATCCTT GGGATAGTTC GTTACGAnTT GGATCCGGTC GATGCCGTCG ACATCCGAGA	180
30	TGCGGCACAG CAGGTCGGAC AGTCGCGITG nCCGCTGGCA GTGTCGTAGT GGTAATGTTT	240
	CACGGTTTG ACCTAGCAGC GTTCACCT	268

(2) INFORMATION FOR SEQ ID NO: 2507:

- 35 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2507:	
45	AAAAGTGGCT AATATCATCA GCAGAAATGTA TAACATAATC GAATTGCAAC CAGCGATTAT	60
	ACCTTT	66

(2) INFORMATION FOR SEQ ID NO: 2508:

- 50 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2508:

ACCTCCGCTT CAAATGTCAT TGATAGACAT TTAAAGCGGA GGCATGTACA TGT

53

5 (2) INFORMATION FOR SEQ ID NO: 2509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2509:

ACCTATGAn AGATGAAGTn ATTAACCAAA AACACAGTGT TGTAATATTAA

50

(2) INFORMATION FOR SEQ ID NO: 2510:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2510:

TTAACCTATT ATATTAATTT TAGTATCAAT TCTTCTCCA GTTCCTGCGT CATTTTT

57

30 (2) INFORMATION FOR SEQ ID NO: 2511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2511:

ACGTGTTCAT AACCCATAAA GGCGAATATG GTAACACCGA ACATCATGAC A

51

(2) INFORMATION FOR SEQ ID NO: 2512:

45 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

GTAnAGCGGT CCGCGCTTAA AGCGCTTGCT AACTTCGAAC AATGAATCTG CGGAACATCT 60
 TGCGAATCCA CGAGATGATC TCATATGACG GGCAGCGAGG T 101

5 (2) INFORMATION FOR SEQ ID NO: 2513:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2513:

GGGTAATGTA ATAGTATTCA TCTACATCAT CTTGATCATC GTAATGCTGA TTGTACCCCTT 60
 CTAAATC 67

20 (2) INFORMATION FOR SEQ ID NO: 2514:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 25 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2514:

CCCGTCGTTT TCGTGTTTT CGCGGCGTGT CTCCTGTTCG CGCCTCTACT 50

(2) INFORMATION FOR SEQ ID NO: 2515:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2515:

AAGAAAATAT CTCTTGAATA CTGATCGATT GCCATCGAAA AACACTGTTA AATCAAGTTG 60
 45 CCCAGTCCAT TGTTGTTCAT CCATTATGAT AATCCTTIGA GTAAAGTGTGTC GCGTTCAATC 120
 CAATCGATAA CTTCATCCAA ACCTTCGTCG GTTTTTAAGT TAGTAAAAGT AAATGGACGT 180
 TTACCACGAA ATACTTTAGT ATCTTCAGCC ATTTGTTCTA ATGATGCACC TACATANGGA 240
 50 GCTAAATCAG TnTTGTTAAT TACAAAGACA ATCTG 275

(2) INFORMATION FOR SEQ ID NO: 2516:

- (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2516:

CTGCACCAAC AATAACGTAATACACTGTATA TACTAGTAAT CGCTAACATA CCGATATTA 59

10 (2) INFORMATION FOR SEQ ID NO: 2517:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2517:

TCTGCTACTA CGTATACGAT AGAATGGATT TCTTTTGAA CCTAAACGTG TTAAACGAAT 60

TTTAACTGCC ATTATATAAAA TCTCCTTAA GTCATGTTT AATTTTTATT TTCTACAnG 119

25 (2) INFORMATION FOR SEQ ID NO: 2518:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2518:

ATTCCTTTT AAGTTTTAA AAATCCAAA TCCTTGTGGT AGGGCCATGA AAGGGTTGGG 60

(2) INFORMATION FOR SEQ ID NO: 2519:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2519:

ATAGAAGTGA AGCACGTAGA TTGAAACGAT GGTTAAATAA CGAGAGACAT TTAGAAAACA 60

50 ATAAAAATGA GGAATAATCA ATGATACATG GAATTGGTGT AGATTTAACG GAAATCGATC 120

GAATACAAGC GTTATATAGT AAGCAACCAA AATTGGTTGA GCGGATTITA ACTAAAAATG 180

55

GGTTTGCTAC AAAAGAAGCG TCAGTAAAGC ATTAGGCCCC GGCCTnnGGA AAC

294

(2) INFORMATION FOR SEQ ID NO: 2520:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2520:

15 TTTAGGCCG AAGAgtAGT AATTCCGGT CCTTAAGGG GCGGGTGGTT AACCATGGCA	60
ATTAATCCC GGGATGACCT TACCTAATAA CCACCTAATA ATTACCCGGA CCAAAGGTGG	120
AAATAATCCC TCCGGTCCTT CCCGG	145

20 (2) INFORMATION FOR SEQ ID NO: 2521:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 169 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2521:

35 TTTAGTCAC CAAAATTCTC GCATTTAATC GATAGAATG TGCAATAACT AAAAATCGAT	60
CTAATAATTG CGTTGAAAAA TTTGGCTCGA CAGCACTCAT TACAATTACn AGTGTATCTA	120
TATTACTTAC AGGTGGTCTT TTCAACTCAT TTTCCGCTC AAACACTTG	169

35 (2) INFORMATION FOR SEQ ID NO: 2522:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 88 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2522:

46 ATCCAGCCTT TCAACAAATA AATCTGAAAT TCGATGTTCT AAAATTTCTG CTTCTTGATG	60
TACTTCTTCC CAATTATATT TCAATATT	88

50 (2) INFORMATION FOR SEQ ID NO: 2523:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2523:

CAGTAACATC AATCTGTCCT GTAAAGCTTGT GGTACTCCGA TACAACCATA AGTCAACGCA	60
10 CCACCAAAAA CGCCTTGGAG CCGTTCTACT TATTAGTCCA AGTTTAGACA TTGAAATACC	120
AACAACTTTG CAnTCCATAG TATCTGAAAA TGAGACATT GCCTGCAATA AATTTAACnC	180
15 ATCATTTTA TTATGTGGCA TTACTGCTAA TTTAACGTAT TCTGGGTT	228

15 (2) INFORMATION FOR SEQ ID NO: 2524:

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 119 base pairs
 (B) TYPE: nucleic acid
 20 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2524:

25 CTCATCCATA GCGCTGGTAT TAGTATAGGT GTCAAACCAT TAGCGTATAT CATATCTTCT	60
GGATGTTnCTC ACATATTCA AGATGCACAT TTTACTTCTC TCGTACCTTA GTACTGGGA	119

30 (2) INFORMATION FOR SEQ ID NO: 2525:

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 35 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2525:

40 TACCAATATT AAATTTGAAC ATTATAGTTT GACCATCATA ATCTATCTTC TCTATTCAT	60
TATAACTAAT ACTTCTATAA TAAAATTGGC CATTCAATAC TACATTCAATA ATTAATCTTT	120
CATTTGTTGC TATAATGCC CCTTCAAATT CATTCTCAC TTGAACCTGA TACTCAATT	180
45 TTCCTAGCAC TGACGGACCC TTTTTTCAG TTGGAAATAA ATCATTGGT TTCACATTAT	240
CTAAAATCAT AATATCCCTC CCACCTAAAAA CTATAAACTA TTCTTCATAG GTATATGAAA	300
TACAAGTGAT TAACTATThA ThATnAAGCT TAACTGTAT TCCCTTTCA AGATAAT	357

50 (2) INFORMATION FOR SEQ ID NO: 2526:

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2526:

CACGCGTCCG	GCCACCTGGA	CATGGCCGAC	CTAGAAGCCA	AGCTGCAnGA	GGCCCAGAAG	60	
10	CATCGGCTGC	'GCCTGGGTGG	CCACTGATGG	GGCCTTTCC	ATGGATGGCG	ACATCGCACC	120
	CCTGCAGGAG	ATCTGCTGCC	TCGCCTCTAG	ATATGGTGCC	CTGGTCTTCA	TGGATGAATG	180
15	CCATGCCACT	GGCTTCCTGG	GGCCCACAGn	ACGGGGCACA	GATGAGCTGC	TGGGTGTGAT	240
	GGACCAGGTC	ACCATCATCA	A				261

(2) INFORMATION FOR SEQ ID NO: 2527:

- 20 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 108 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2527:

CTnTAGAGGA	TATGAGTTCC	TCATCATAAG	AATTCTGGA	TCCTTAATAG	ATCTCTTGCT	60
30	ATATATAATG	TAATAGAAAC	ATCTTTTAAG	GATCCAGAAA	TTCTTAGA	108

(2) INFORMATION FOR SEQ ID NO: 2528:

- 35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 109 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2528:

TTTTAAAATA	CTTGGTAGAA	GTTGGAATGG	ATTAATCATT	AATTATCTCT	CAAGATGTAA	60
45	TGACTGTTCA	GCACACTTTT	CCGATATGAA	AAGAGATTTG	AAAnACAATA	109

(2) INFORMATION FOR SEQ ID NO: 2529:

- 50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 150 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

55

GATTAATTT GTTATACCTG GCTTGTTGTC ACGATCAAAT TTAATAATAC CATCTGAATC 60
 AGTTACTGCG CTTTTAATT TTTTAGCTGC AACATTCGGC TCGTCTAATA ATGAAATNGA 120
 5 GTTTTTAGCA TTATCATCAC TCCTTACTCAT 150

(2) INFORMATION FOR SEQ ID NO: 2530:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2530:

TTCTTTTGG CCAGTGGCAG GAAGTACGGT CTTATTTGGT GTTATGTTAA GAAGGTATTC 60
 20 CCATTTATTT ATCGTTAAAT ATGnATATAG TATAGTAATT TTAATTTGTT GCATCATAAT 120
 ACTAGGT 127

(2) INFORMATION FOR SEQ ID NO: 2531:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2531:

CACATAATGA TTCGAATTAT TGTTTTAATT AAACCTTTT CACATATGTA TAAATTTAn 60
 35 AGAGCGCATG CGTGAATATT TTCATTTGAT TCAAAGGCAA AAGATAGCCT TATACTCTTT 120
 TC 122

40 (2) INFORMATION FOR SEQ ID NO: 2532:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2532:

AAATAATAGA GCAATTGGCA CATGTAAGAA TGCAAATTGA CTATGGCATC CAGTATTTG 60
 GTCACAAATG GGTTGTATAT GAGCATGTTG AAAAATAAGT CTTATGnTAA ACACCTTAGTA 120

(2) INFORMATION FOR SEQ ID NO: 2533:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2533:

GAGAGCGGCC GCGTGTAAGG AGAGCGGGGT TCGTCGCGT GACGCGAGTG TGGTCGCGA	60
GAAGnGGACC AGAGTTCCCG ATCGAGGCTG TTGGGTAAA T	101

15 (2) INFORMATION FOR SEQ ID NO: 2534:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2534:

TTGCTCATTA AAGATTATCC CAATCAATAT CATCTATATT TGTTGTACCA CTATTATCTT	60
TTTCTCTTTC TCTTACTTTG TnCATTGTAC CAGTAGATTC AAGATATATT GT	112

30 (2) INFORMATION FOR SEQ ID NO: 2535:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2535:

ATAACGAATC CAAAAATATA GAGAATGACA GTGAAACTTA AATAGGACTC T	51
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45 (2) INFORMATION FOR SEQ ID NO: 2536:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2536:

(2) INFORMATION FOR SEQ ID NO: 2537:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2537:

GGATGTACCA CCAGCATAAT AAACAACCTTC AAATGGATTG ATAAAGAAGA nACCAGCAGA	60
GATAGGTAAT TCATTACCAT GTTCTTCTTG TAGACGTTTA CCTTCTTCAA TCTTTGCTC	120
ATTTGCATCA AGTTGTTGTT GTAAGTTATC TCGCTTGT	158

(2) INFORMATION FOR SEQ ID NO: 2538:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2538:

TATATTCAATT AAATCCACAA AGCGGTCCCG TATAAACATG GGTTTCCATT	50
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30 (2) INFORMATION FOR SEQ ID NO: 2539:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2539:

AAAGTATACA TATCACTCAA CTAATCAATA ATCATACTTA CCTTCAACAA ATTCTTTAAC	60
ATGCAGTGTGTT ATCCCTTGAT AATATGGATA TTtGTTAAT CTA	103

45 (2) INFORMATION FOR SEQ ID NO: 2540:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

CAATCAATTG GTCTATCTGT TGAGTGGCAA CCTCTAATAA GCCTTTATA TTGTCA

56

(2) INFORMATION FOR SEQ ID NO: 2541:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2541:

TGGAAATAAC GAAAGTATTAA TTAATTAAA GCATCTTCT CCCAATACTT TAATGAGTGA

60

TATTGTTAT ATACCGTATA AAACACCTAT TTnGAGGAA GCAGAGCGCA AGGGAAACCA

120

TATTTA

126

20 (2) INFORMATION FOR SEQ ID NO: 2542:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 201 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2542:

ATCAGTTCT TCAAAAATAA CTGAAGTATC TGATGCTGAA AATTGGAATA GTTGATGGGT

60

CGGGnTATTG ATTTTTATCT GATGTAAAAA TCCATAAGTG CCATAAGATG TATATAGTTT

120

CTTCATATGA AAGGTCCCCC TTATGTnTTT ATTTATTATA CGATGATAAA CTAGTCATTA

180

CCACTATTAA TAATTGATTA A

201

(2) INFORMATION FOR SEQ ID NO: 2543:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2543:

GAACTTTATT ACAGGAATAG ATAAGCACAG TCGTGTACA CAGACGCTAA ATGCGCGTTC

60

50

GTATG

65

(2) INFORMATION FOR SEQ ID NO: 2544:

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- 5
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2544:

10 AGCTATTAAT GGCCTATAA TTGATACAAT AGTTATGATT AATAAAAAAA TAACCGATAA 60
CATTGCAATT TTATnATGAA TAAATTTAGG AAATGCAATT TT 102

(2) INFORMATION FOR SEQ ID NO: 2545:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2545:

25 AATCTACATC CAGCATGATC nACATCAnAG CnGGATTCAc CCTTACTTCA 50
(2) INFORMATION FOR SEQ ID NO: 2546:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 100 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2546:

AACCATTCAA CACACGACAC TAAAGTGCAG TACAATCCTA CAAAACGATT GTTTTTATCG 60
GGTGGGTCTAA CCATTGAATA AATAATGAAT AATGGTAAnA 100

40

(2) INFORMATION FOR SEQ ID NO: 2547:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 156 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2547:

ATTGAAAATC TTTTATCATT TCATACTGT GCATAATTAA AAAGGTGAAA CCTCTTATTT 60
TGAGAGTTCA CCTTTTTAT TGTTAATTAA AATTTAATT TAATGATTAT TTTGTTTCAC 120

55

(2) INFORMATION FOR SEQ ID NO: 2548:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 142 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2548:

AAAGTGAAAAA TTGGAGGTGT AATTTTGACT AGAACTTATA ATATTATTTGG TATCCCTTCT 60

TGTCTTATAT CTTTTATTAT TATGGCGTTA CCAATTAATTT GGTACACAGC TTCAGCATTA 120

TGGTTCTTCC CAGGTGCAAT CA 142

(2) INFORMATION FOR SEQ ID NO: 2549:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2549:

CCCCAACCTA CnAACGACAT TACACAATCA GTAACAGATC GGTATTAAAGA CTGGATATCG 60

TGGCCTCTGT TGAGTTAATA TCAACAGTCC TCCAGAACTC G 101

(2) INFORMATION FOR SEQ ID NO: 2550:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 72 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2550:

TGTAACCATG ATTTAGATGA CTAACGTGC TTGCCAACAT GCTTCATCCA ATGCCGAATC 60

CTTTAGCTAC AT 72

(2) INFORMATION FOR SEQ ID NO: 2551:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2551:

5	CAGTAAGAGG ACAAGGCTAT AAGGTGGAGA ATCATGTTA AAACACTCTA TGCTAGAATT	60
	GCGATTATT CCATTACGGT TATTTTATT AGTGCATTAA TAAGTTTGTT ATTAAACAAAT	120
	GTTTACTATC ATTATAATT AAAAGCATCT AATGACGCGA AAATCATGAA GACGCTTAAA	180
10	GAAGCAAGAC AATATGAACA ATCAGCTAAA CCAACGCACA TTCAACAATA TTTCCAnACA	240
	TTTAGGGTCA AATGGAATT CAATAATG ACCATGGATC CATAAAGGTC nTnAGACCTT	300
	TTT	303

(2) INFORMATION FOR SEQ ID NO: 2552:

- 15 (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 150 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2552:

25	TTTACTTTAG CCTTTATTGC ATTTGTAATT TATAGAACTG CGAACAGGTG ACTACTGTnA	60
	ATTTATGTGA TTAAAGTTTC AATGATATTGATTGATTAG ACCATTGCAA AAGCGCAAGG	120
	TTCTCATGTG CTGCTACAGT TTGCGGTCTT	150

(2) INFORMATION FOR SEQ ID NO: 2553:

- 30 (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2553:

40	GCACTCGTCA ATAAAGATGA AGCAGCATT AATCAATATA CGGCAGAATA CAAAAATT	58
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(2) INFORMATION FOR SEQ ID NO: 2554:

- 45 (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2554:

65

AAAATCGTTG AATAATCAAT CATAGCAGTA AGCTATGTnA TATATTTTTA AAAATTGA

118

(2) INFORMATION FOR SEQ ID NO: 2555:

5 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2555:

ACAAACTTCAA AGAAATCATG TCACAAAAAA AGTATTGAT TTTAATCATA nGTGGCGACA

60

ATCCGCATAC CAAAGCACAA CCTTTAGTCA ACCAATTCA G AT

102

(2) INFORMATION FOR SEQ ID NO: 2556:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2556:

AGATGCATTA GCAGCATTAG ACGTTAACCC AGTTGGTATT GCTGATGATG GTAAGAAAAA

60

ACGTATCATT AAACCAGTTA GAGAAAAAAT TGGGGATTAT ACTTCTGTAG GTACACGTAA

120

ACAGCCAAAC TTAGAAGAAA TTAGTAAATT AAAACCGGAT TTAATTATCG CTGATAGCAG

180

TAGACATAnA GGTATTAATA AAGAATTAAn CAAAATTGCA CCAACATTAT CATTAAAGAG

240

35

TT

242

(2) INFORMATION FOR SEQ ID NO: 2557:

40 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2557:

TGCACTCATA ATCATCGGAA TATGTATAGA ATCAACTATC ACTTTGCCGT GTTTATCTGT

60

GTTAAATGTG TAACCATAAC AGTGTGTCCC ATTTGGATTA TGAATCTCAG AATAATCATC

120

AAAAATATCC TGAATTnCA AATTAATTTC ATTATAGCGG nAGCAATGTC TATAAAATTT

180

55

TATTTCAA

248

(2) INFORMATION FOR SEQ ID NO: 2558:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2558:

15	TTGGGTCGT GATTGAAAAA ATCTAAGGCT AATAAACCAT GTTGTTCGCG GCTTAATAAT	60
	TGTTTGAGTA TACGGTTAAT AATTAACTCT GTATCATGAG GGTTGACGCCG AAAGTCAGAG	120
	CGCATATAAG TCATATAATT CTCGAAGATT TCTCTATCAG TATTGCTTAA TCTTAATGAT	180
20	TTAACATTAT TTCTTTGT TAATTGCGCA GTACTTTCA TTGTTACTTA AGCGCTCCCT	240
	TTAAAATGTT TAATTCAAA TTAAAATGGA AATGATTTA TAGTATTAAT AAGGTCAATC	300
	ATATCATATT AACGCATAA ATATAACGAT TAATATTGGA GAGGAAAATG AGGACACTTA	360
25	ATAAAAGATGA ACATAATTAT ATCAAGCAA TAGCTAATAT	400

(2) INFORMATION FOR SEQ ID NO: 2559:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2559:

AAGGGAAATT TAAAAGTATC ATTTGATTAT ATAGATTGGA TTAAATTAGG TTTTGGCCCA	60
TCAGGAAAGG AAAACTACTA TATGTACAAA AAATTGGTA TTTTACCAGA TATGGAATAT	120
GAAATGGAAG AAATTCGAGC AGTAGAGAAG TATGTTAAAG AGCAAGAGTA GCAGACATGT	180
TATAAAAGAC TGTGCAAAT CACCCCTCGTT TTACATTGTA TTCAAAGAAG AAGGTAAAAG	240
ATAAGANTAT TTGCAACTTA AAAAGTCAT nAGCTTATCG GTATCCATAC ATCATGGATA	300
AATGAGTnCA ACTAATTAAC AAATCACGAT ATA	333

(2) INFORMATION FOR SEQ ID NO: 2560:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 87 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2560:

GTAAGACATT CACATTTATC ATTCACCAAC AATGGGTTTA CCAACCATGG TTTAACGAAT 60
CCAAAACCTTT GATGCTCGTA TGTCTCA 82

(2) INFORMATION FOR SEQ ID NO: 2561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 117 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2561:

TTGCATTTG ACGTAAATGA TAAACAAAT CGTGATTATC TCCTAATTTC CTAACCGCCT 60
TTTCAATTTC TAACGGCGTA ACTTCCTTTA GAACAATGCC AAATTTATAT TTTCAT 117

(2) INFORMATION FOR SEQ ID NO: 2562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2562:

AAGTCAAACA AAATAAGCAA ACAGACTGGT CAGAAGATAA GTTGAATAAT ATAGCTTTGA 60

(2) INFORMATION FOR SEQ ID NO: 2563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 80 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2563:

AAGTGTATT ATTGTGATCA TAAAGTGAAG TATTACCTTT TTATTCGTA ACCCGATTCC 60

ATGCGCTTC AACATAAACT 80

(2) INFORMATION FOR SEQ ID NO: 2564:

(i) SEQUENCE CHARACTERISTICS:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 64 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2564:

AGACATGGGC TTATCAGATA AAGTAAAAGC ATTACCTAAA GGGGGAGGCG GTAAAGTCATT

60

10 ACCG

64

(2) INFORMATION FOR SEQ ID NO: 2565:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2565:

GTTTGTTTAT AGTACCCCTGG ATTTTCTTTA TTTCCATCAT GTGAAACTGT GTCAGTGAAC

60

GCTGAT

66

25

(2) INFORMATION FOR SEQ ID NO: 2566:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2566:

TTAATTATTT GTGACGTATT ACACGCATTA CTTTAGAAAG TGATTCCCAA AGCGAATTAT

60

CTTTACGATA AACTA

75

40

(2) INFORMATION FOR SEQ ID NO: 2567:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2567:

ATATTATTAT ATTGCTTTTT TTCAGTTTGCG CGTTGTTACT TTCATAACTT

50

(2) INFORMATION FOR SEQ ID NO: 2568:

55

- 5
 (A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2568:

10	TITTTAGGATT TGTAGTAGGT GAGCGACGTA TTnnGGATGC AATCCAGAGA ACAATAAAATA	60
	TTGAGAGAGA GCAATTCTATA ACAGCAGTTGA AATACATGTG TTACGAATTG CTTTTATGTT	120
	AGTTTTTATC ACACAAGTTT TTGATGCAA CCCCGTGATA GCGAAACTCA TATGTAGATA	180
15	ATACAGCTTT TTCAGCATCA TCTACATGAA TTCCAAAACA TCA	223

(2) INFORMATION FOR SEQ ID NO: 2569:

- 20
 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2569:

AATAATGCCA TACAGTGAAG ACCATGCGCA TCAATCGATG TCTAGTGTGT ACTACGTC	58
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30
 (2) INFORMATION FOR SEQ ID NO: 2570:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2570:

40	CGTTTCATTA GTTTAAATG ATCCCCAATA CTTTTGTAC CTTCACCAAC TATCGTTCCA	60
	ACACTATCTA CAGCTTTTC TGTTGTTATT TTAAACAGCG TCTATTTAAT GTCTTATCCA	120
	ATTAGTTTA TCTCTTAATC CAAATTATT AGTATGAAAA GTCCAATTTT TAAGAATTGT	180
45	CTAAACAGAT TCCGCAACAA AACCAAGCTAn AAACCGTCCA TACTATTGGA ATnAAAACGC	240
	CAATGTTATA	250

50
 (2) INFORMATION FOR SEQ ID NO: 2571:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2571:

AGCTCCTTTC TTTCTAGTTA ATATCATTTA ATCTTGTGTT TCAGTGTCAA AATTACCTGT	60
5 AAAAACACA TTTTTATCTT TTAAAATAGG GATTACACTT TCCACTTCTA TTTTATTAAT	120
CTCAGATATT TTCATATGAA TTTTTGAAA TCCTGAATCG AAAAGTTTAG TTGG	174

(2) INFORMATION FOR SEQ ID NO: 2572:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 390 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2572:

20 CATGCGGTAG GTATTTCTAA TCTATGGACA AATGGCGGAT TTATGCCAAA TGGTATTGTT	60
GGTTTCTTCT TTGCATTATC AATTGTAATT GGTCATACC AAGGTGTGGA ACTGATAAGGT	120
ATTACGGCAG GTGAAAATCAA AGATCCTCAG AAAAATATCG TTAAAGCAGT GAATGGTGTT	180
25 ATCTGGAGAA TTTTAATTCTT CTATTTAGGC GCTATTTTG TTATGTTTC AGTGTATCCT	240
TGGAATCAAT TAGGAGACAT TGGAAGTCCG TTTGTTGCAA CATTGCTAA AATCGGTATT	300
ACATTTGCAG CTGGATTAAT TAACTTGTT GTAnTAACCG CAGCAATGTC AGGATGnAAC	360
30 TCAGGGnATT TGCAGTGCAG GTCGTAATGA	390

(2) INFORMATION FOR SEQ ID NO: 2573:

- 35 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2573:

TAGAGTACAG AACATACGCA AGGAACCTCGG AGTTTACTCA CGGGACTTnT	50
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45 (2) INFORMATION FOR SEQ ID NO: 2574:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 59 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2574:

TACAATTACA AACGCATCGT GAGATGTTT AAGCATCAAT GAGAATCTAA CTCTCCAAG

59

5 (2) INFORMATION FOR SEQ ID NO: 2575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2575:

GACACAACGT ATGACGCATG AAGAGTTGCG TGTTGACAAT CAAGATGATC ATAGCCAAGT
 60
 TAGTCTAAAT GGTTACACAA AGGGGTCTGA GAAAGATCAA GAAGCATTCA CTAATAATAA
 120
 20 GGATGAGGAA GCAGTTGCTG CTAAAAATCC TGAATCAGAA GAATATAAAG TGAATGAAAA
 180
 AATAAAAAAA GAACATAAAAA ACTTTATTTT TGGTGAAGGT GTTTCAnGCG GTAAAATATT
 240
 25 AGCGGCATTA TTATTGGTA TGTTTATTGC GATTTAACAC CAAACATTAT TAAATGTTGn
 300
 TTTACCAAAA ATTAATACGG AATTTAATAT TTCTGCGTCA AnAGGGCAAG GTTGATGACG
 360
 GGATTCAATGT TAGTAAACGG TATTTTAATA CCAATTACGG
 400

30 (2) INFORMATION FOR SEQ ID NO: 2576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2576:

45 TTTAAATCGT ACCTTAAATT TGAAAGTAAT AAGACACACC ATTACCTTC TAACTCTATC

60

GATAGTTTCA ACAAGAAAT CGnTAGTACA TTCAGTTATT TAGAACGCGT TGATTACAG

120

45 CT

122

(2) INFORMATION FOR SEQ ID NO: 2577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

CACATTGAGG TGCAGTCATA CCTTGTTAA ATGTCCAAGC ACGTACTTCT T

51

(2) INFORMATION FOR SEQ ID NO: 2578:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2578:

15	AATTATGACT ACAGGTCTGA CTCCCCCTTG TTCAGATCCC TGTACTGGTG ATAAATCTGC	60
	TAAAATAAACCA TCTCCTCGTC TAATCATTCA TTCTGTTGAAT TAGAAGATAAA ATATGTTTCG	120
	TTGCAATCGC ATGCTTCACA CTCTATCGGA AAAGCTTCGT TCGCTAGGGA GAGATTTAAA	180
20	TCAGCCATTT GTGAATATCC TTCTTTTAAA GATTGTTCTA AGCTATGACT TCTATTTGA	240
	CTAAAAGATA ACATATGAGA ACCTCCAATT GATTCCAAAA GTTATTAAT GACCTTTAAT	300
	TACTCTAAATG ATAACAAATT TTATATGCAC TGACCATAATT ATTTAACAA TTCATTTGTT	360
25	ACAAAACGGT GGATCACCCA TCATGGATAG AGTCGGGGn	400

(2) INFORMATION FOR SEQ ID NO: 2579:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2579:

40	ATAAAAACCT AATTGACTCA TAATCTTCTA ACGGTATATC ATCCACAATC ACAGTATGAT	60
	TAGGATTATC GTTAGATACA TCTnTCACTG CCTTATCTAA CCCCTCATCA CC	112

(2) INFORMATION FOR SEQ ID NO: 2580:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2580:

55	CATGAnTnTA ACGGATTTCAT TCCATATATC AATTGCGTTT GTTATTTAA TAATGCTATT	60
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ACTACAACTT CGATTTAAC TATATTATA AAAAATGCG CCTACTCATA ACATTCTTG 180
 GCTATTTAAC TTTAATAAGC TAGGGCCAAG TTTGTCAAA GATAAGCGCA C 231

5 (2) INFORMATION FOR SEQ ID NO: 2581:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2581:

ACTTCGTAAA ATTTATCTTG AGTGGTTGTT TCTATATTAA GATTCAATTTC ATTACACTCC 60

(2) INFORMATION FOR SEQ ID NO: 2582:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2582:

30 GTCAAATGCT GAGTTCTAAT AATGATGTTG GCCACCATGC ATACAAAAAT GCTAAAAGAG 60
 AATTACGCAA GATTTAGAT AGCTATCTCG AAAATGGTAA ATTAAAATAT TACGATATTA 120
 TCGTTACAAG CAATTAGCT ACTAAACATC CGTTTTCGA GTATGCACGT TCATTGATT 180
 35 TTATCATTGT TTCAGATATC GGTTAATAA ACGTTGATGT AAAAAGCTGG GGTGAAAAAA 240
 CATTATCA CTTTGATGTA CCTGATGAGC ATGATACAGA nAnA 284

(2) INFORMATION FOR SEQ ID NO: 2583:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 56 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2583:

50 GAGTCAGTCG AAGTTGTCG TTGACCCGT AGAAAGTGTAA AACGGCATTG TGAATG 56

(2) INFORMATION FOR SEQ ID NO: 2584:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 67 base pairs

55

- (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2584:

TCGACTAATG TAATGTAGGC ATTGGACGTC AAATGTAATG TGGGGCAATC CGACCGAGATG

60

12 ATGGTGCG 67

(2) INFORMATION FOR SEQ ID NO: 2585:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

²⁰ (x1) SEQUENCE DESCRIPTION: SEQ ID NO: 2585:

CGTAAACCGCC CCTTGTCGGG GCCCTCCAAG CCTTTTAAGG GGACCCCCCG GA

53

(2) INFORMATION FOR SEQ ID NO: 2586:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2586:

35 ATTAGCAACA ATGTCAGATA ATCGATACCA ACTAATTAGG CGAGAAGCGG TTTCTCATGG

60

TCTTAGTGGC CTAGAAATTG ATGTATTTGA TTTGCATTCA AATAAGTCTA GACATATTAG

20

CTCGTTATCA GGTGGAGAAA CTTTCCAATTC GTCGCTTGCA nTAGCTTGTAG GGTAAAGCGA

89

AATTGTACAG CAGCAATCAG GAGGTATTTC ACTAaATCA ATATTTATTG ATGAAGGA

38

(2) INFORMATION FOR SEQ ID NO: 2587:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2587:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2588:

GnGCAATTAT ACCACTATAT TTATTTCTTA TACTCCATTG GATTTATAGT TGTATTAATA	60
CATTGACTCA AAAACTAATT AATCAAATAT GTTTTTAGA TT	102

15 (2) INFORMATION FOR SEQ ID NO: 2589:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2589:

GCATAATATC GGATATGCGn GTGTGTCAGT CnCATAGTCG nTGGATTGCG	50
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25 (2) INFORMATION FOR SEQ ID NO: 2590:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2590:

TTAnAAATTG CCTnTCCAAT TnTAAGAAC TTTTTCCAA GGTAAAAAAA	50
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40 (2) INFORMATION FOR SEQ ID NO: 2591:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 200 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2591:

CTTCATCCCT TACTTTTAAT TGTCACGTCA AATAATATTT GTCTTTAACT AGTAATAACT	60
CCAAATATAT TTAGTTTGTG GTGCTAGCTA TAAACACAAA TGAnTCATAA CACTATATTT	120

TGATTTTAA TTATTTATAT

200

(2) INFORMATION FOR SEQ ID NO: 2592:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 74 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2592:

15 TGCATTAATC ATCTGGATA CTCTTCTAC CAAAGTAATG ATTGCACTAC CATGACGACG 60
 ACCAGCAATA GTAT 74

(2) INFORMATION FOR SEQ ID NO: 2593:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 244 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2593:

30 CACCTGCTCA CCTCTATTTC CAAACAATTG TGATTGAATT GAATCATTCT AATTTTGTA 60
 AAGTTACTTG TTTAATTAT TATATTTATT AACTCTATGA TAACAAAAAT ACTGTTGTG 120
 TATAACAATA AATTGAGATA CTCATAATT TGATAATGTG AAATTGATAC TTTCAAAAT 180
 AGTTGAATAT GACAATTAAT GATTAGTTT GCnATGGTGC TATAAnCAAT ATTTAGCAGT 240
 TATC 244

(2) INFORMATION FOR SEQ ID NO: 2594:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 201 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2594:

50 ATATGGTATG GAACTAACGG AAGAAGGCTT AGCATACTGTT AAATATGCTA AAGTGATTT 60
 AGATAGTAAT AGCGAATACG AGAGAGAnAT AAAAGGACTT TACAATAAGA AGGTAAATAT 120
 AAGTATTAAC ATGCAAGAnA GTCAGTATTT GTATCGCTAC TATAATAAGA TTAGTGAATG 180

55

(2) INFORMATION FOR SEQ ID NO: 2595:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 156 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2595:

AAAAAGTATT AAAAATTGCA ATTCTTAAAC TGTTATTICAT ATTAATATTCT TAGCAAATA	60
ACATTGTAAA ATAAGAAAA ATAATTAnAG TATTGCACTT TATTGAAATT TATATTACGA	120
TAGTAATGCA GAAATTATA TATGCAAAAT ATTATA	156

20 (2) INFORMATION FOR SEQ ID NO: 2596:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2596:

TGATCCGCAA ATCGCTGAAC ACgttcttct ATTGGAATCC CTCCATTACAC TTTTAGCTAG	60
AC	62

30 (2) INFORMATION FOR SEQ ID NO: 2597:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2597:

TTACCTTTAG nTTTTAAAAC CTGACCCTCC AACCAACCTA ATTGGTTAAA TGGGGATCCA	60
45 TTTATATAAT CCCAGGCCTA ACCTTCCAAG GACCAACCTA AGGGATTAAT CCCCCCAATG	120
GCCAAAGTGG GATGGGTAAT	140

50 (2) INFORMATION FOR SEQ ID NO: 2598:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2598:

5 ATTAATTGGG GAGTTAAATT AAAAAAAAAGG GGTTCCCTTCC AACCGGAnCC ATTCCCATT 60
 TGGATTAATAA ATTCCCGCCT TTGAAAAAAAT TGTTTGCCGA ACCGCCCTTA AG 112

(2) INFORMATION FOR SEQ ID NO: 2599:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2599:

15 ATACCGCCCC CAGTTCAATA AGAAGCCCTG GATCAGACCT GACCCTGGTA TGGGGGGAAT 60
 20 CCC 63

(2) INFORMATION FOR SEQ ID NO: 2600:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2600:

30 ATACTATGGA ATGCCTTAAT GGTGGATAAT TTCACCAAAT TAATTTTAAA AAC 53

(2) INFORMATION FOR SEQ ID NO: 2601:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 73 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 40 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2601:

45 AACTAAAGGT TCTAAAGATA CAGTAAAAAT TGAAAATAAC TATAAAATGC GTGGCGAGAA 60
 AAAAGATGGT AGT 73

(2) INFORMATION FOR SEQ ID NO: 2602:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2602:
CGGTTGCCAG CCAAAACTTG GCAnCCAAGG CAATTATAGC AAGGCACCCA CCTAAATTG 60
10 CGGACCACCC GGAATGCGGC CACCAAAGTT GGTGGGAGGC CATTAA 108

15 (2) INFORMATION FOR SEQ ID NO: 2603:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 59 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2603:
AAGCTTATAA CTATTGTGT TTGTGATCGA GATAGGTTTG CCTGTAAAAA TGGCCATCA 59
25 (2) INFORMATION FOR SEQ ID NO: 2604:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2604:
ACGTCCAAAG GGCGTTCGC CCCAGAnGTG CTGGCAAGGT TCCACAACGn 50
35 (2) INFORMATION FOR SEQ ID NO: 2605:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 107 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2605:
GTCCAATGTC ACATTAATTG ATTGGTATAA GCGATCACAA GGnCATAGTG AATATTTGC 60
45 ACCAGACGGT GTACATTTAG AGTACAAAGG AGTCCTAGCT TTAAAAG 107
50 (2) INFORMATION FOR SEQ ID NO: 2606:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 54 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2606:

GTTTAAAGCA ATTGGAAGG ACATTGGTTA AAGGATGGGA GTGGCAAAT CTGG 54

10 (2) INFORMATION FOR SEQ ID NO: 2607:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2607:

GTTTAGCTG AAGTTAATGA TGAAGATATC GGAGCTATGG TAATTAACAGTAAACT AGTTAAACTT 60

ATTTTCATGC TTGATTATGT TTTATTCAT TCAATTCAAA AAAGCTATAC AACACATATG 120

25 AATGAGCTTA AAAATTGTTT CGATTACATA GCTGAATTAG ATAATCATTA TGCATTAGCA 180

ATGTATCGTA GAACGCTAGA ATGTTAACT GAACCACAAA TTGATGATTC AAATGATGGC 240

ATAGTATTCT CTGAGTTAAC ACATCCACTC ATAGCAGATG GCAGTAGCCA ATGATTCnC 300

30 ACTATCACAn AATATACTGT TAACTGGGT CGAATGCTTC GGGnTAAATC AACATTTTAT 360

GGAAAT 366

(2) INFORMATION FOR SEQ ID NO: 2608:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 142 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2608:

45 TTCTTAGACG TCAGGTGGCA CTTTCGGGG AAATGTGCGC GGAACCCCTA TTTGTTTATT 60

TTTCTAAATA CATTCAAATA TGTATCCGCT CATGAGACAA TAACCCTGTA TAAATGCTTC 120

AATAATATTn GAAAAAGGAA GA 142

50 (2) INFORMATION FOR SEQ ID NO: 2609:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 55 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2609:

GGGTCTGCAA TTGANGGCAG GTAGAGCATT AAGTCAGAAT TGTAGTAAAT

50

(2) INFORMATION FOR SEQ ID NO: 2610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2610:

ATTGGGTGAT GAATTTGAC GGTATTGTCA AGTCCAGTGG CTAACTTCCG G

51

(2) INFORMATION FOR SEQ ID NO: 2611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 93 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2611:

30 ACAAAACCTCG GACTGCCAAT TACATTTACC TTGGGGGGTC AGAAAACAATG GGTGCATAAA

60

GGCCCGTGTT TCGAACGGG AAAAGCCCA GCA

93

(2) INFORMATION FOR SEQ ID NO: 2612:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2612:

45 ATGATGTTTT TCGGCTAATT TTTATACTGA ATTTAGTTTA ATTAACCTAT GATATTTT

58

(2) INFORMATION FOR SEQ ID NO: 2613:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2613:

TTCTCACCAT TAACTATGCA TACTCACTTT ACACATAAAT TTGCTTAACA TGCAGAACGG 60
 5 AAATAAAATCA TTACCACATA TAGATCCCAT CATATATTAA nA 102

(2) INFORMATION FOR SEQ ID NO: 2614:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2614:

TGAACCTACAA GACGCTTATA TCATTGACGC ACATTTCTCG CAGTGAAAGA AACACTTGCG 60
 20 TA 62

(2) INFORMATION FOR SEQ ID NO: 2615:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2615:

TGGAGCATT CACATACATT GGCAACCTCA TGGAGCTTAT CATTCTACCT TGGGGnACAG 60
 35 ATATAACAAAC ACTAACGCAA CATGGATGGT GTCGTGATA ACTTTCAATC TATAGAATTAA 120

(2) INFORMATION FOR SEQ ID NO: 2616:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2616:

CTGTAGTAAA TTGCCAGAAT CGGTATCAAT ACCAGTCTGT GACTGC GTTG GCC 53

50 (2) INFORMATION FOR SEQ ID NO: 2617:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 128 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2617:

ACATATGATA TGAGTATATT AACGTTAAA TTATGGATAC TCTAAAGACA GGCGATTTTG	60
AnAAATCAGC AAAAAGTTAT ATGATGTAAG TGGGACAGAC ATACTAGATG TAACACATTA	120
ACCAAGTG	128

(2) INFORMATION FOR SEQ ID NO: 2618:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2618:

CCTAACCGTG TGTGTATGTA TACCTACAAA AAAATTTACA TTGTGACACT GCGTACGTG	59
--	----

(2) INFORMATION FOR SEQ ID NO: 2619:

- 25 ..(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2619:

GCCCATGGTC AATCAGACAC ACGGATTGAA CGTTAACAAAT TTATGACTTT AACAA	54
---	----

(2) INFORMATION FOR SEQ ID NO: 2620:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2620:

ATCATTGTCA CATTGAGTAG CCGTAAAATG GTCAGACGAT CAATGCGAAC TGA	53
--	----

(2) INFORMATION FOR SEQ ID NO: 2621:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

EP 0 786 519 A2

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2621:

CTAAGTGTG CCCGAATAAC CGTCAATCCA CGGAGCACAT AGGATCTCCC ATG

53

5 (2) INFORMATION FOR SEQ ID NO: 2622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 59 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2622:

TGGGACCGAT AATCATTGCG ATGAAACACCT TCCACCGTCT CTTACTCACT ACCTACGGC

59

20 (2) INFORMATION FOR SEQ ID NO: 2623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2623:

ATTAAATTGT TATTCGTCA TTAGGTGACA ACTTGATGT AGATATTTA ACATATTTA

60

30 TGCT

64

35 (2) INFORMATION FOR SEQ ID NO: 2624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2624:

CCGTCCCAAGA ATATCATATG ACAAAATGTTA AGAGACTTGA ATGATCATAAC ACGTG

55

45 (2) INFORMATION FOR SEQ ID NO: 2625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

56

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2625:

GTGGTCACCA GGTACGGGGG ATACAGGGGG TTAATCCCAC CTTGGATAAG TGGAAAACGG

60

5 ATTTCC

66

(2) INFORMATION FOR SEQ ID NO: 2626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2626:

CCACCAATGG GTGGGGGATG GAATAACCCT TAATGCGGTG GTACCCGGGT AATGGTAGCC

60

20 CC

62

(2) INFORMATION FOR SEQ ID NO: 2627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2627:

CATGTTTTTT CATTCTTGA TGACGACACT AGAGGTTCCC GTGTTCATTA TTAA

54

35 (2) INFORMATION FOR SEQ ID NO: 2628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2628:

45 TTGGCCAATG GGCGATACAC CCTCTCAATT CGATACATAA CTCAGGCTC AGTCAT

56

(2) INFORMATION FOR SEQ ID NO: 2629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2629:

TGTCGCTAGG TAACCGTGCA TCGITCACAG GTACnTATGA TTTCACCnGA

50

5 (2) INFORMATION FOR SEQ ID NO: 2630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2630:

15 GAAGGnCCCA ACCCAGGCGT TAAAGGCCGA TTGGGTTTAA ACCAAAGGTT

50

(2) INFORMATION FOR SEQ ID NO: 2631:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2631:

CGCGAGGTGTA TCCGTCGATA TGTCGAGAGG AAAGATTGAA GTGTGGAAGA GTGTTGAGTA

60

30 ACCCT

65

(2) INFORMATION FOR SEQ ID NO: 2632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2632:

TGAAAGAACT TTAGCTAGAC GTTCGTAAG GTCTTTGAC ATAAAGCTAG AGA

53

45 (2) INFORMATION FOR SEQ ID NO: 2633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

65

AAAAAGCCAAA AGGAATTAAT TAACCCGGG GTTTAATTTC TAATGGGAAT TTG

53

(2) INFORMATION FOR SEQ ID NO: 2634:

- 5
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2634:

15 GGTGTTCAC A TTCTGAAGGT TTAGAGAGTT AAGATTATAT ATATATAAGT TTTGGGGTGA

60

TAGATATG

68

(2) INFORMATION FOR SEQ ID NO: 2635:

- 20
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 80 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2635:

30 CCAATTTCAC TTGGTGCTGC CATTTCGGTC TCTCGTGTAC TTGTGATTGA GGTGCCATTG

60

TTCCCGTAGA TGGTTCACAT

80

(2) INFORMATION FOR SEQ ID NO: 2636:

- 35
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2636:

45 CTTACACCCA ACTTATTGAC TTATAATCTA TTAAAGTGCC ATTTTACAAT CTGAATCCCT

60

TAATATAGCA ATAATTACAA CTTCCGACAA ATGACTTGTT TTATGTGCCT GATTCAACAA

120

TGAACATCGT AATGCGACnT AATA

144

(2) INFORMATION FOR SEQ ID NO: 2637:

- 50
 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2637:

5 TAATTCGGCA ACTAATATCA AGATCATGAT CAAATACTAC TGCCATTTC TTATACCTCT 60
 TAATGTGAAA TCACTGnCAA CACATAACAT CTTAAAACCTT TGAC 104

(2) INFORMATION FOR SEQ ID NO: 2638:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 151 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2638:

20 CATTCATCCG TTTTTTTGGT TCATGTACAT ACCATTGTTT TGTACACAGC GAAGTCAGTT 60
 AACCTTATAT CCTTGATATAA CAGTTGAAT CGGCAATATT AAACAGTACT TTCCCAATTG 120
 CTTTCTTCCT CAATTGTGCG ACGGACTGTA n 151

(2) INFORMATION FOR SEQ ID NO: 2639:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2639:

35 AAGATCAACT GAAATTCAATG TGTGCCCCCTT TATTAAGATC ACATGGAAAT A 51

(2) INFORMATION FOR SEQ ID NO: 2640:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2640:

45 TTAGCTAGTT GGTAGGACGG CTACCAGGCA CGTCATAGCG CCTGGAGGGG TC 52

(2) INFORMATION FOR SEQ ID NO: 2641:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs

55

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2641:

CAGGCTTAAA CCTGAGTTAG TGCCATTCAAT AATTGCAATC CCAAGCGACG GAA

53

10 (2) INFORMATION FOR SEQ ID NO: 2642:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2642:

20	ATGTTTGTCATCTGGAGCnA TAGAACAGGG TTTCATCATGA GTTCATCAACT TACCTTCGCC	60
	GACAGTGAAT TCAGCAGTAA GCGCCGTCAAG ACCAGAAAAG AGATTTTCTT GTCCCCGATG	120
25	GAGCAGATTG TGCCATGGCA AAACATGGTG GAAGTCATCG AGCCGTTTTA CCCCAGGCT	180
	GGTAATGGCC GGCGACCTTA TCCGCTGGAA ACCATGnCTA CGCATTCACT GCATGCAGCA	240
	TTGGTACAAC CTGAGCGATG GCGCGATGGA AGATGCTCTG TACGAAATCG CCTCCATGCG	300
30	TCTGTTGCC CGGTTATCCC TGGATAAGCG CCTTGCCGGn CCGCA	345

30

(2) INFORMATION FOR SEQ ID NO: 2643:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2643:

CTTATACGGA TGTATAGGTC GGTCCAAACA TTTGATTTA GTGGAGAGCA GCCTTTCACA	60
AATTATGTTC AATGT	75

45

(2) INFORMATION FOR SEQ ID NO: 2644:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

55

TACCGGTTAA TTAACCAGGG CCCCGGTAAA AAAATCCCCG GTATTCCCCA TTCCAAC

57

(2) INFORMATION FOR SEQ ID NO: 2645:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2645:

15 AAAGCAATTG GCCCGATAAG AGTAGAGACG AATTGCTTTT AAGGTTAAAAA CAAAGTGAGT

60

TCAATT

66

(2) INFORMATION FOR SEQ ID NO: 2646:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2646:

29 CAGTATAACT TGTGACCTAT TTAGAGGGGC ACGGTTGGTA CAATGAGTCT GAAACCGTAT

60

CAA

63

(2) INFORMATION FOR SEQ ID NO: 2647:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 208 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2647:

45 TAGAACATGG ACCGGTATTT TACATCCTGT ACGCCTAACTC TGTTGTAAGT ATCTTTAGTG

60

AACCCTTGCT CTGGAATAAC CGCGATTCTG GGCAAACAGT GTGTAACACG ACTnTATGGG

120

GATGTGTGAG TAATCATTGT GnACTGTTGA TTCTGTTCTG GAATCCCATT TCACAAACACG

180

ATCTTGGAAG TGCTGTCATT TTAGATGC

208

50

(2) INFORMATION FOR SEQ ID NO: 2648:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs

55

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2648:

TTTTAACCTA AAGAAACTA ACACAAAAAG AGAATGATTG TGTACCGCTT TCCTTTTCA	60
CTCAATAACT TTATATTTAG TTATCCTTAT AATTGTAATT TATGTTAGTT GGTAAATnTT	120
TACATATATG TATTTGATAT GCTTGATAAT	150

10 (2) INFORMATION FOR SEQ ID NO: 2649:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2649:

AGTTTAAC TG ACATCGAGTG GTACACAATA GCAATGGTTG TGTGTAAAGT CCTGGTGACA	60
ACATATGAGA GTAACATTTG TAGTGATTAT CTTGTACTGA GAGAATTGAC ATCTATGnAG	120
TTTATCACGT GCAAATAT	138

30 (2) INFORMATION FOR SEQ ID NO: 2650:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2650:

TCACAATTGC AAACCTCTGG CACGCACCTCA TCTGCGATTTC CACAAGCTAC AT	52
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(2) INFORMATION FOR SEQ ID NO: 2651:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2651:

GAGTCAAATT AAAATGCCTA TTGGCCATTG TGATGTATAA TCACCTAGTT CACATATACT	60
---	----

(2) INFORMATION FOR SEQ ID NO: 2652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2652:

GGCCGGTAAT TGTCACCATC ACAAAATTGCT AC GTT GAAAC ATCGAGGATT CAAGCTGGAC 60

15 AGCAGAG 67

(2) INFORMATION FOR SEQ ID NO: 2653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2653:

ACACATCTTA TATGTCTTAC TGATTTAAGG AAAGAACATAG TGGATCAAAC TG 52

30 (2) INFORMATION FOR SEQ ID NO: 2654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2654:

CAAGCTGTAA ACCAAGAATT CCAGCATTAA ATATCTCTn TGGTATCGGT TGAGATAAAT 60

ATTCCGTGTG CTCATTAAT GTAGTAATCT TTATTGTAGT TCCTCAACCT ATGACACGAA 120

45 TATTGCACAA TATTAGTATA GACAAATATT TCCTTTATAA TCTCATTCAA TTTTCTCCTT 180

TAATTATGTA TCATACATTG TATATTCTCA TATAGACGTT TTGnCATATT CATAGCTTCA 240

ATATTAGTGC ATTTATGTAT T 261

50

(2) INFORMATION FOR SEQ ID NO: 2655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2655:

AATCCTATTA GCACTTATAA TGATCATGAA AAGATGTCAT CGAGAACAC CTAGTACACG 60

5 (2) INFORMATION FOR SEQ ID NO: 2656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 75 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2656:

CGCCGAAAAC AATAAATTCT CGGAACATAG AATTATCAC ATACCACGCT TGGATTATCA 60

CAATGGACTG AGTCG 75

20 (2) INFORMATION FOR SEQ ID NO: 2657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 202 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2657:

TATTAATAT GCGGTTGCAT ATATCTACGG CATGATTAA CCGTGAACCA TGAATCATT 60

TAATCGGGCA CGCGTAAAT GCTCATTGAT CCGCAAnATAC CACTATATAT CTAATAGCAA 120

35 GCGTCCAGGA TTCTGTGTTT TATAAATTAA AACTAACTGA AACGTGTGTA TCAGTTCACT 180

CCGnTCGATT ACCACACTTC AA 202

40 (2) INFORMATION FOR SEQ ID NO: 2658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2658:

CGTACATGTG CATCATGTAT CTACGTCAAT AAGATGATGG GGTCACATGA TTGGACCATT 60

(2) INFORMATION FOR SEQ ID NO: 2659:

- 5
- (A) LENGTH: 207 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2659:

10	CTAATCATGT CATGTCTACA ATTATTGGA GTATTGCTGA CGAAATGCGT TGTACAACTT	60
	TTTCATTCTA GCACCTTGCG GGGGCCACA AAnGAATTGG TCCATTCTCA nCATCAGTGG	120
	GGGGCGCGAA TAATTTGAA ATTATTCTGC CACTCCCACT TCATCGATTA AGTTGTAACT	180
15	CTACATTACA TTTGTCTTAA ACCATTG	207

(2) INFORMATION FOR SEQ ID NO: 2660:

- 20
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 54 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2660:

TTAATTATGT ATAATACTTA ACAAGATCAC CTGATAGATG TCTAAATATT ATCT	54
---	----

30 (2) INFORMATION FOR SEQ ID NO: 2661:

- 35
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 130 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2661:

ATTAAAAAAA AATGGGGTAA TTTCCGCCAA ATCCCGTTTC CCCCTTGCCTA AGGCCAAATT	60
TAACCACCCCT TGCCAAATHA TTAAGCCAAA TTTTCCGATA TTIGTTCCG TAATGTTCT	120
45 TTAATTAATA	130

(2) INFORMATION FOR SEQ ID NO: 2662:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 104 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

AAAGTAAAAC CAGTCTATTG AAAAAGGTGA AAAATGGTGA CGCAGCGTAA ATAAnTGGTC 60

TCTGGTAGGG TAAATCGCGT TGTGGGTTG TCACATCAGG AACT 104

5 (2) INFORMATION FOR SEQ ID NO: 2663:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2663:

AAAAAGAATA AAAGGACTCG AAAAACTCAA AACTTATTnT AGATAGTCAT CGTGACAAGA 60

AACAAACATT TAACTAGACT AAGAAAAATG CTTCGATTAA AAGGCAGACT CATCA 115

20 (2) INFORMATION FOR SEQ ID NO: 2664:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 164 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2664:

GCATGCGCCA CGGTGTCTCA GCAGAGTGAC TGCCACCTTG TGTGCGCAGA GTCTGCGCCT 60

AGTACAGTCA GGGTGAAACA CnCTATACGC ATTAGGTACA GTACTTCCTG TCTCCGACTT 120

35 GAGTAGAACG TGACATATCT ATCAGCATTC ACTCGAAAAA GGG 164

(2) INFORMATION FOR SEQ ID NO: 2665:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2665:

AATTACGCAA TnTCCCTGTC TTAnTGAAAG GAATTGACCT GTTAATTCGT 50

50 (2) INFORMATION FOR SEQ ID NO: 2666:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2666:

ACAATTCAAT AGAATTTACC CGTAACAGCG TTGCACTGCA CTCAAGACGG CTGACGTATA 60
GCAC 64

(2) INFORMATION FOR SEQ ID NO: 2667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2667:

GTAGAACCG CGACGGCGCG GCGGCTGAGC AACATCTGAC TACCTATCGG CCGCGC 56

(2) INFORMATION FOR SEQ ID NO: 2668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2668:

GGATCGATTG ACTACATGAC GTGGGnGACGC AATTATAACGG ATAGTCCACT 50

(2) INFORMATION FOR SEQ ID NO: 2669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2669:

GCAAGATCGA ATTACAATCA CGACGATCAA CGCACGTAAT CATCTCTGAT CACAGTAA 58

(2) INFORMATION FOR SEQ ID NO: 2670:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2670:

ATACCAGCCA GACTTCGATC AACAGTGTTC AACTGCATTG CCCAGTAAGT TGGATAGCTC 60
 5 GCACATAGTG CTACAAGTTA ACATATACAAn CGAGTTTGTA TCTCAAGCTT GAAGCTTGAC 120
 TACC 124

(2) INFORMATION FOR SEQ ID NO: 2671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2671:

CGCTTACTGTC ATAAAAGCCC CTAACACCCG GGCACTACGC TCGTTCGCCG GCTT 54
 20

(2) INFORMATION FOR SEQ ID NO: 2672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear
 25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2672:

TCAGCGATT AACACTAATT CTTCTAGCTA TTCTCTGTAT TTGGACGACG A 51
 30

(2) INFORMATION FOR SEQ ID NO: 2673:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 35 (D) TOPOLOGY: linear
 40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2673:

GATAAGTTGT ACCATATTTC GATGCAATTG AATGGACAAT GAGGTCACCT GGCTTGT 57
 45

(2) INFORMATION FOR SEQ ID NO: 2674:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear
 55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2674:

5 TCCTTTGGCC AATTTTCCA AGTTTAACC CAAACGGCCC GGGTTGGGTC CCCAATTCCA 60
 ATCCAAAATA ATTTTA 76

(2) INFORMATION FOR SEQ ID NO: 2675:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2675:

20 TCCGGGAACC TTACCCAGTG GCCCTACCCCT ATGGGTTAAC CCAACCAGTG GGGCCA 56
 (2) INFORMATION FOR SEQ ID NO: 2676:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 67 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2676:

TGCGGGGTCT CGTGCGGCCG TCTGCGGTGG TTGTTTGTCC GGTGGTGTGT CGGAGTCTTT 60
 GCCAGCT 67

35 (2) INFORMATION FOR SEQ ID NO: 2677:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2677:

GGACAGAGGC CTTGACCCCC CCACAATCCT GATTCACCGT AAGTTGCTCT CCCCCC 55
 (2) INFORMATION FOR SEQ ID NO: 2678:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2678:

AAATTGGGGC TTCCATCCCC ATTCCAAATT ATTAACCG TTTAGGGGCC TTATTGGCAC 60
 5 CATGG 65

(2) INFORMATION FOR SEQ ID NO: 2679:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2679:

20 ATTTTGGGAT TAAACCTTA ATTAAAATTG GCCGGAAAA GGAAAAGGCC GGTTGGAAA 60
 AGGCCAAGGA AAAGACCTTG GGAACATTA AAAACCTTGG GCCAAGGCCT TCCAAAACC 120
 GGTTGGTTT TATTTGGGA ACCAAATTGG GGGGCCGGGA TTGGGCCAAA ACCTTG 176

25 (2) INFORMATION FOR SEQ ID NO: 2680:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2680:

35 GCCCCAAAGA ATTCAAATAA CCAATTCGGAC CCGGTAATGG CCACnTAATT 50

(2) INFORMATION FOR SEQ ID NO: 2681:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 63 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2681:

TGTGCATTTA TTGCATAACC TATATATGTG TGACCGATAT TTAGTGCAC CTTCAATGGT 60
 50 GCG 63

(2) INFORMATION FOR SEQ ID NO: 2682:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2682:
TTATCCAAGC TTCCGGATAG TTTCAAGAGA AACCAATGAA ATCCGTTATG GGACCAATGG 60
10 GT 62

(2) INFORMATION FOR SEQ ID NO: 2683:
15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 70 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2683:
AACAGCATTC AAGTGAGTTA CTGGGGTTTA TGCACCATCA TTGGATATCT GCACAAGGAA 60
25 TTTCAACGTG 70

(2) INFORMATION FOR SEQ ID NO: 2684:
30 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 68 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2684:
CTTAAAATTC CCCAGTTTCC TTCCCTTTAA ACCCCATGGA ATTATCCCGG CCAAAAATGG 60
40 ACCATTAT 68

(2) INFORMATION FOR SEQ ID NO: 2685:
45 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 58 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2685:
TTTTAACAAA ACACCTAGAT ATGTTCGCTG ATCAGAGATG CCTGGTGACC GGTGATCC 58

(2) INFORMATION FOR SEQ ID NO: 2686:

- 5
- (A) LENGTH: 87 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2686:

10 ATCCATCCCT ATAGGCATTC ATCCTTTAAC ACCAACGATT TACATTATGG ATATAACGAC 60
 TTGAGGGGGA ACGTGGGGTC CATCCTA 87

(2) INFORMATION FOR SEQ ID NO: 2687:

- 15 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2687:

25 ATGGCTGGGC GCTTTACGTG GCCACATTAG GATTATGGCA CTGAAGCGTA 50
 (2) INFORMATION FOR SEQ ID NO: 2688:

- 30 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2688:

AACGGTCGTA GGCAAGGGAC TCCCCCCnGG nGCTAnATGA ACTGGTCGTA 50

(2) INFORMATION FOR SEQ ID NO: 2689:

40

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2689:

50 GCTAGCATCC ATGGCTCTTA TGCCGAAGCT GAGTAGACTT AGGTGACGGG TGCCTGACAA 60

(2) INFORMATION FOR SEQ ID NO: 2690:

55

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 146 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2690:

ACTTAAAAAA GGAAGATTAG AAAATTCTATA AAAAAATTTT GCTGGGGATT CTTGATCCCA	60
TGGGCCATn TCTGGATTAA GGTTATTGGG TTGCCAGCC AGGTTAGCGG GGCCCCCATT	120
CTTCCAGGCT CGGTTCTCC CAGGAC	146

10

(2) INFORMATION FOR SEQ ID NO: 2691:

15

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2691:

ATTGGTGTCT AGATCATTAA ATACTAAACA TACAACACGA CTAATTCCAT TCA	53
(2) INFORMATION FOR SEQ ID NO: 2692:	

25

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 113 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2692:

TATTGAATTC AAACTATGTA CTATTCCTA ATAATACAA TAAAACGAC TACCATACTG	60
GCCAGAAATA TATTTTATTT GTTACACATT AATTCAAnTC CTCCATAATT TGC	113

40

(2) INFORMATION FOR SEQ ID NO: 2693:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2693:

GACTTATGTC CGTGTTCGCG TGAAGGCACG TCACGTAAAC TACCCGGTAC AGCT	54
(2) INFORMATION FOR SEQ ID NO: 2694:	

55

- 5
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2694:

10	CTTCAGCATG AAGAAAGTCGG GTGATATAACA TCATATCGAT ATATAACCGAT TATATCATCA	60
	GAACATTCTC CTGGTATCAT TAGATAGATG ATAATTTGAC ACAGTCCACA ATTTGTnACA	120
	ACGCCGAGAC TCAATGGCAT CCTGTACnTG ATCTATGCCG GAAAACACTA GTCTATATGC	180
15	CCGCAGACGT CCACTATATG CATC	204

(2) INFORMATION FOR SEQ ID NO: 2695:

- 20
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 112 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2695:

ATAACTCTAA TTTGAATTAT CTCTCACTAT TAAAACGCGA GCTGTGTAAT AACGAACGCT	60
GACATAATCT TGTATTGTCG CATCATTGCG TGGTATTATC ATAnTGCAGGT TA	112

(2) INFORMATION FOR SEQ ID NO: 2696:

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 148 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2696:

TGGCAAAATT AGATGTCTGA ATAGTTTTAT TTACAAGTAC AAACCTTGTA CCATTTAAC	60
GTAAACACCAA TTACTTATT GAAAAGAAAA TAAATGTATT CATGAAAnACA CACTTTCCAT	120
45 AGCACTCATC TATAGTACTC AAATTCAAG	148

(2) INFORMATION FOR SEQ ID NO: 2697:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 101 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2697:

CCTATAATGC TAAACATTCA ATATCTCTTT GGCAACTATC TCCCTTCTAT TACCAAAGTT	60
5 ACGATAGCAA nACAATAAAG CAAGCATGTC ATGCTTACTT C	101

(2) INFORMATION FOR SEQ ID NO: 2698:

- 10 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2698:

TTGATAACAT TTGAAAAGCT GCTCCGATAT CAGCAACCAT TTCATCGACC ACAATATACG	60
20 ACATAGTCAC AAAACTGATT AGAAGACACC AATTGCTGAT TATCAAATCA CAAATTAAAG	120
nTGAGATTCA A	131

(2) INFORMATION FOR SEQ ID NO: 2699:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2699:

GATAGCGGTT GTTAATCAAA CGATGGTACA TGCTTACATG ATGGGCCATG TTTGATAACA	60
35 GCTCTCTATG ATTACGATGG AAGAATGGTT TATTTCATCT CAATTATTCC TATTAATGn	120
AACATGCCCT AGCAAACGGA TACAACACAA TCACAACATC ACTTGAAAT TGTTAACCT	180
40 GAGAACCCACA TACGCGnAAC AC	202

(2) INFORMATION FOR SEQ ID NO: 2700:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2700:

TTCGAATTAA ACAAACGTAT CACGCCATAA AGGTTGTATA TGTTGTTGT AAATTC	56
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- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2701:

TATTGCGGGC TTATTAGTAC ACGATCTATA TGATGGCAA ACTTATGTCT TTCATATTCA	60
AGTGTGACAT TGTGCGGTGA TTATATTTAC GCGTCGTTAT CTACGAACGC CACATTAAGA	120
15 TTCGAAACTG ACAATCAACT CATAACGCCA TGGTCCTAGA AAn	163

(2) INFORMATION FOR SEQ ID NO: 2702:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2702:

TAnACAATCG TAATCGAGTC AATGATGTGA ATTGCCACG TGAGCGCTAA GAATGCGACA	60
30 TTCCACACGA TAAGGCAGTG CGCATGCGCA CTGACCTAAT AACACTGAGG ATGAGTACTA	120

(2) INFORMATION FOR SEQ ID NO: 2703:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2703:

CTGCTTGATT AGGATCGTAT TTATATGAAG ACTGTGTTCC ATAATGATGT GCGTTTGGC	60
45 TGAAGTCCCT TAAAATGTACn TGTGTATAAA TGCTATAATT TAG	103

(2) INFORMATION FOR SEQ ID NO: 2704:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCTATAACGC CTCTCATCGT TTGGTCACAT ATTACCAATT TTCATTTAT GTTCTCGATA 60
 ATTGTATGCG NTGTTTCTCA CTGTCATCAC ATTGATACAA CTCATTGTCA CTTTATACGA 120
 5 TTCACACACC TCGATACGAG TGATGATATA TGACAAAGCT 160

(2) INFORMATION FOR SEQ ID NO: 2705:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2705:

TTATTGTTTA AGATGGTTAA ATGTCATCAT ATAACAnTTA ATTTTTAGCA ATTGATATG 60
 20 CCTATAACCT ATAAATTCA CGTCAACAGA AAGTGACAGG CATACGGATG TGTGAA 116

(2) INFORMATION FOR SEQ ID NO: 2706:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2706:

TTACACCTGC AGTGTATGGA CTATGGCTAG ATACAATAAT TTTAGTCATC AAAnCTACATC 60
 35 ATACAAACTT ACGACTTACA CATATCTGCT TCTAATATCTT CTAAGTGATT AAAGCTCGAC 120
 ATCGGAAGCT ATTCTAAATT ATTATCATAT ATCTAACTAA CTGACCTAAT ATATACTACC 180
 ATAAATAACC CGCCTCAAGG TTTCGCATCCG CATATAATGC TTAGAAGTC 229

40 (2) INFORMATION FOR SEQ ID NO: 2707:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2707:

50 TCCATATCAA TCCTGAAAGT ACACATATAT CGTACACCAT ATGGTACAAT TTCCTATAnT 60
 ACACATCACG CATCTTCAA GACACATGTT AGGCGCTGGT CGGTGTATCT CAGAAATGCA 120

(2) INFORMATION FOR SEQ ID NO: 2708:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2708:

GGAACCTTTTC TGATTAAGTG TTCACACGCC AACCATAACA TGTATTGATG CACACAATTG	60
TTGCTAA ⁿ CT CACTAACAAAC ATACGACCAT TTTACTTCA ATACATATGA TCCGTATAAC	120
TCGAATT ⁿ C TGCTTATAAA TGACCATTG GACGTCACA ATGTTAAACG ATTGGAAATT	180
TTAAAGTTAG CATGTCCACA TCCGAGCAGT AACTATGCCG TACCATTGT ATA	233

20 (2) INFORMATION FOR SEQ ID NO: 2709:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2709:

TTGTACCTAC CAACGAGGAT ACAATGGATG TCACACGAAA ATTGGGATAT AGATGTCCC	60
GT	62

35 (2) INFORMATION FOR SEQ ID NO: 2710:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2710:

CTTTAAAAAG GATAAATGAT TGAGA ⁿ AAA ACCCATTGCA AAATCATGCT GCTCATGCTG	60
TAGACTTATC GTTGACAC TCGCGTAAGA GCGAGCAGTG AAAT	104

55 (2) INFORMATION FOR SEQ ID NO: 2711:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 141 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2711:

GTCCAGAATA TTAATCTGAC ACAACCATT TAGCnGGTGG ATTAAATATA TACGACCTCA	60
5 CCGCAAGAAC CTCTATTAA CTTAACCTAT CATGAATAAA CTGGCGCTTG TGATATCATA	120
TGAAGATTAG CGAAAGATAG C	141

(2) INFORMATION FOR SEQ ID NO: 2712:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 202 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2712:

20 TGGTATTGAA TAGCAAAATT TTGACACTAT TTGCATACTC AATGATACAT CATATCGTTA	60
TATGGATTTC TATGGTCATT AATGGTAAGA ATTTGATACG GAATATTGGC AGGTTTGGAA	120
25 ATCAAATAAT ATGAGAAAATT GTATTAACnA TTAGTCAAGT TAACGCTCAT AAATAGACTC	180
ATCnCGCGCT ATAACGCTTA CC	202

(2) INFORMATION FOR SEQ ID NO: 2713:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2713:

35 TTGAACGTGTC TAAGACTTGG ACGCTAAATG AATGCGTTGA TACAAACGGT GAATCC	56
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(2) INFORMATION FOR SEQ ID NO: 2714:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 45 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2714:

50 CATGACCGAC ATCAGGTGCA AACTCCCTCA TTAATCTGGG AAAACTGTAT CCCGGTAGCT	60
--	----

(2) INFORMATION FOR SEQ ID NO: 2715:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 124 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2715:

CCTATAACTA CTCATATTG CAATTACACA TCCTCACTTT TGTCAATTGT TTGACAATCn 60

AATACAGTT ATGCACAAC CCATTTAAC GGAATGGAGA GCACATATGG ACAGTAAATT 120

AAAT 124

(2) INFORMATION FOR SEQ ID NO: 2716:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2716:

GGAATATGTA CTATTATCAT TTGATGTAT TACTCATATT TTTTGTAAATG AATGCTATCA 60

CCTACAAAAA ATTACTTGA AACAGTAATA ATAATTAATT ACCACAAACC ATGATAAATT 120

TAATAnCTAA TCTAAAATAT CGCATGTTCA nAGCCACAAG ATATAACGCG TTCCGTAGAT 180

GGAACCTAGAT AGTATAAGGC GCCGTGGAGC CTGGCCT 217

(2) INFORMATION FOR SEQ ID NO: 2717:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 72 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2717:

ATGACATACG CGCATATACA TGCTATCCCG AACTAATATT GATGCGTATT ATGTAATTGG 60

AGCGAACACT CA 72

(2) INFORMATION FOR SEQ ID NO: 2718:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 139 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2718:

CATATCATCA CTATATCCAT TGCGTAATAG TGATGATATT GATTGGCATA ATGGTATATG	60
10 GCAGATACGA TAACATAACn AACACCTCGG ATAATTGCTA TTAGCTGCGA AGTTATCGTG	120
CCTGATTTAA CGATGTAGA	139

(2) INFORMATION FOR SEQ ID NO: 2719:

15

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 79 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2719:

25 CTCTATCATA TCTAGCCATA TGCATGAGAT TATCGTTAT CTCGACACGC TCTTAAAAGG 60
CGACACCGGC ATATGATGT 79

(2) INFORMATION FOR SEO ID NO: 2720:

30

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 53 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2720:

CAATCACAAT TGAAATTACA CAAATAACAGC CCATTGCGATG ACACAGAGCCA ATC 53

(2) INFORMATION FOR SEO ID NO: 3221:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3731:

CGCCCGAGGC TACCATTTA CCATAAAAGAC CGGTCTAAAT CCTTCCGGTT TCCATGGGCC 60
ATTTGG 66

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 169 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2722:

TnCCTCGCCG AAAATGACCC AGAGCGCTGC CGGCACCTGT CCTACGAGTT GCATGATAAA	60
GAAGACAGTC ATAAGTGCAG CGACGATATC ATGCCCGCG CCCACCGAA GGAGCTGACT	120
15 GGGTTGAAGG CTCTCAAGGG CATCGGTCGA CGCTCTCCCT TATGCGACT	169

(2) INFORMATION FOR SEQ ID NO: 2723:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2723:

CCGGGCCAAG CTGGTGATCA CCGATGTGGA GCGCCAACAT CGCATCGAGG AAAT	54
---	----

30 (2) INFORMATION FOR SEQ ID NO: 2724:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2724:

40 ATCGGTGATC ACCAGCTTGG CCCGGGACAA CTGCAGAGCG TGCAGCAGGA ATTC	54
--	----

45 (2) INFORMATION FOR SEQ ID NO: 2725:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2725:

55 AAAACCATTG TCCACCTTTA GAAAGCTTTT GTTTTGGGAA TACCTAAACC GTGGTTAATG	60
--	----

(2) INFORMATION FOR SEQ ID NO: 2726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2726:

TTTAGGCCCT GTAAACnGnTT GCCGnTTGGn CCGTGTGTAT ATCGGGGGAA

50

(2) INFORMATION FOR SEQ ID NO: 2727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 56 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2727:

GGATCATTAA ACgtGTATCA CCATCCAGTT TGCAAGACGG ATAAAATGCT GCAACG

56

(2) INFORMATION FOR SEQ ID NO: 2728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2728:

ACCCATGGAG AATTAAATTT AAAAACCGTA TTCCGGGTGG ATGCTGGGTG GGTAAGTTGG

60

CCATACTGGG

70

(2) INFORMATION FOR SEQ ID NO: 2729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2729:

ACCACCTTCC CCAATAAGCT GGCCTAAAGC CCCATAATGG GCCATGGTGC GGCC

54

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 74 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2730:

TGTTTGGGGA CCTTAAATGG TTCCAAATTC CAAACCAACCA CCAAAAGAAT TCCAGTTCC 60
AATTAAGCCA GCCA 74

(2) INFORMATION FOR SEQ ID NO: 2731:

(2) INFORMATION FOR SEQ ID NO: 2731:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2731:

AAGTTGGGGA TTAAGGCCAG TTATGGAAAG GATGGATGGT CCATTTGGGC TTATTAGAAG 60
AGCATT 66

(2) INFORMATION FOR SEO ID NO: 2732:

(2) INFORMATION FOR SEQ ID NO: 2732:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2732:

TTTGTAAAAG CCnGTAAGAG TATTTGATT TGTGGAGGC CAAACCAGAA

(2) INFORMATION FOR SEO ID NO: 2733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2733:

AGTACCCAGCG GACAATTCCG ACCCAACTTG GCAATTGAG GTTTGGACC AGGAAATAAA 60

(2) INFORMATION FOR SEQ ID NO: 2734:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 111 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2734:

CCAGGCTGGC AGTTTTCTA AAATGGTGGT AGGAAAATTA CCTAAACCAT TTAGGATGGC 60

15 ATGGTCTTCC ACGGATGGCG GCCGTTAACCC CCAAAAAAGG CCATTCCATT T 111

(2) INFORMATION FOR SEQ ID NO: 2735:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 56 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2735:

CGTATGGGAT GGCCATTCTG ATGACACACA ACGGTTAGGT TAGCAACGTT GTCAAA 56

30 (2) INFORMATION FOR SEQ ID NO: 2736:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2736:

CAATCCGGGT GTGCCGGCGT GTGTACAAGA CCCGGGACGA TTACCGACAT 50

(2) INFORMATION FOR SEQ ID NO: 2737:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 50 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2737:

55 TAACATTTAT TGTGGAGAAA GThAGGTATC GTGGTAGTGA GGATTGTGTT 50

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2738:

TAAATTTAAA CCCGTCGGG TTTCCCAAAT TTGGAATT TTGGAACCCC TGT 53

(2) INFORMATION FOR SEQ ID NO: 2739:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 85 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2739:

ATACCCACCT TGGATTCTTA ATACCCAAA AAGGCCGGGG CAACTTGGCT TAAAAAAACTG 60

25 GCTTGTTTAA ATTGGATTTC CGGCT 85

(2) INFORMATION FOR SEQ ID NO: 2740:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 70 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2740:

GGAAAGTTTA GTAGTTTAGA GTCGAAAAAT TAGTTTCTTA GTGTAACGAA TCCGGACCCA 60

40 AATTTTTTTC 70

(2) INFORMATION FOR SEQ ID NO: 2741:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2741:

CGCGCCAATT TACCTGGCGC AGCAGACGCT CAACGAGGAG CACGGCAGCT GCG 53

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2742:

TGAAGAACATC GCACACACTA TCGAACGCAG ATCGCACATC GAATGCATCA GAATCAGCTC

60

(2) INFORMATION FOR SEQ ID NO: 2743:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 125 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2743:

TATCACCTCT TTTGCATATT ATTAGAATAT ATAATGATCT TTATAGAAAG GAAAGAAGAA

60

25 GAGTTATCAT nGCGATATCG CCCAGCGCGT CGTACACTAT GCCATGAATT ACACAATCAT

120

GCCTC

125

30 (2) INFORMATION FOR SEQ ID NO: 2744:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2744:

45 GAATTTCCCC CGAAACCGGG AAAAATTTT CCCAACCGGT GGCTTCCCC CGTTCCCGT

59

(2) INFORMATION FOR SEQ ID NO: 2745:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2745:

TTTCCTTAA GTTAGTTTT TTATTGGGCC AAAACCGGCC CCAGGAATTG A

51

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2746:

TAATTTGGTC ATAATGTTGT TTCAGATGAA ATGCTAACAA TACACTGATT ACAGT 55

(2) INFORMATION FOR SEQ ID NO: 2747:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2747:

ATGGTGGAAT GGGATTTAGG TGGATGGCCC CCCCAACCAG CCGGTCTTT TTAAGGAAC 60

25 TTGT. 64

(2) INFORMATION FOR SEQ ID NO: 2748:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2748:

AACAAGAGTT ACATGGTTG TGGAAATCAT CGGTTTTAAT TAGTCCAAA GGATGGATT 60

40 AATCGGTAGG GGGGTAAG 78

(2) INFORMATION FOR SEQ ID NO: 2749:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2749:

GCAAGTGGCG GAGTCACACT TATAGACAAG AAGTACGACA TCTTGTATGT GGTG 54

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2750:

TATTTAGATT CAAAGCATCA AATTGGTTTC GTACCCTTTT GCACATCGGT TGGGATAA

58

15 (2) INFORMATION FOR SEQ ID NO: 2751:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 79 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2751:

25 GGAAAACCCC CCAAATTTTC CCCCCCCGTT GGGAAAAGAG TTCCCAAAGT TGGAATTAGT

60

25 TCCCAAACCC GGGAGTTCC

79

20 (2) INFORMATION FOR SEQ ID NO: 2752:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2752:

40 AGAACCGAGA GATAGTGCCG AGAGAGCGAG AGGTTTTAAT AGAGATGTTT GGCGTACTA

60

40 GTTAGCCG

68

45 (2) INFORMATION FOR SEQ ID NO: 2753:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2753:

55 ATAATCTATG GGGGGACCGT CTGGTAAGGA ACCTGGTTGC CCTGCCAATG AAGCCACCC

60

(2) INFORMATION FOR SEQ ID NO: 2754:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 76 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2754:

ACAAAGGTTT TACGCCAAA TTGTTCACTG GCTAACTGGG CGATGGTTAG TATTGGCAGC 60

15 GCAAAAGTGG CAGGGG 76

(2) INFORMATION FOR SEQ ID NO: 2755:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2755:

ACCTCAGGGA CAATTAAGG TTTTCCTTCG GAATGAATGA CAACAAACAAA T 51

30 (2) INFORMATION FOR SEQ ID NO: 2756:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2756:

45 ACGTATTCCC TCGTTCTTAG GTCTTCTAAA CATAGGTGAC TTTTGTTCG 50

(2) INFORMATION FOR SEQ ID NO: 2757:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2757:

AAATGCTTCG TATTAACGCC TATTTTAGCT CCGTTATAGA CACAACCTAC ACA 53

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2758:

ACACGGCAGC GAATACTCGT TTGGTGAGCC TGTACACATC TAACACGAGA A

51

15 (2) INFORMATION FOR SEQ ID NO: 2759:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 115 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2759:

GGGAAACCA ATTAAGGATT TAAAGGTTnA TTTAAAGGGG CCGCCACCGG GTTGGGGATG

60

25 CCCTTTGGGC ACCTTAAGAA AGCCCCGATG GAAAGGGACC GGTTACCTTA ACCGG

115

30 (2) INFORMATION FOR SEQ ID NO: 2760:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2760:

40 TTTGGCCAGG CCAATTAATT CCTGGTGGCC AATTAATTT AAGGGGACTT TTGGGGAAAT

60

40 AAGGTTAAA ATTGGAAAAT GGTCCAATTT GGACCTTTG GCCAATTGGA TTCCCGGCTT

120

45 AAAAAGATTG GGACCGGTAA ATCCCTTTT AAATTACCTC GGGCCAnGGC CCAACCAAGC

180

45 CAAACCAATT TAAATCCGCC TGGAAACCAA CCCATAnTTC CTTTACC

227

50 (2) INFORMATION FOR SEQ ID NO: 2761:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 59 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ACACTATTGT GCCAGCGCAC CTTCGAGGTA TCTTGCATCA CTCAGCTGTT TTTACTGT

59

(2) INFORMATION FOR SEQ ID NO: 2762:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2762:

15 TTATCCTGTT CCTAAGCCCG ACGGCTCGGC CACACGATTA ACCTTTAACG CCATCTTGTC
CAACCTGT

60

68

(2) INFORMATION FOR SEQ ID NO: 2763:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 116 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2763:

30 TGGAAAGTAC CATATAAGTA ATGGTAGTCG TTTCAGAAAG ATATAAATCG TTGGGAAAAG
AAGAAAATGAC AnATTAATGT AAATATTTGT TCATGTACAA ATAAATATAA TTTATA

60

116

(2) INFORMATION FOR SEQ ID NO: 2764:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2764:

45 TTGTTACAGT GGTGTAGCGG ATCGCACGGC CTTCAACTAA GTGGTTCAAT GCTTGATACC
AGTTATGAGT GTTGGTGC

60

78

(2) INFORMATION FOR SEQ ID NO: 2765:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2765:

ATATATTCTGT ATGCACCTTT TGTAAGGCTT TGTAATACGA AAATTATCAC TACAATGATT 60
 5 GCTGTAACGA GTAACGACAT ATATGGCACA CCGTTTTAT ThGTTTACC AA 112

(2) INFORMATION FOR SEQ ID NO: 2766:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2766:

TATTGAAGAT TTTTCGAAG ATAAAGGTGA CACATATTCA TGTCACTGTTT AATATCGTTA 60
 20 CCTTACGTAA CCATATAAGA CTGTAACCTG TGTCACTATCA TTCGTAGAAC nTTTGGAAAT 120
 GAT 123

25 (2) INFORMATION FOR SEQ ID NO: 2767:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2767:

35 GTCCGCGCCA CGGAATGGCC CACGGGACGA TAAGTGAGGG CACCGACGGC CGAACCCAAG 60

(2) INFORMATION FOR SEQ ID NO: 2768:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2768:

GTACGCGGAG CACGAATTCC GCGGATCTGG GAGCATCTCT AGGTAAnTTT 50

50 (2) INFORMATION FOR SEQ ID NO: 2769:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2769:

CTTAGGTAGC TCAGTGTGTT ATTGAGAGGC CTGTTGGCAG GCCCCGGACG ATC

53

(2) INFORMATION FOR SEQ ID NO: 2770:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 69 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2770:

AAATTGATAG CGTGCACAAA CCAGGTCCAT CCACGAACAT GCCAATCCAG CCCAGGAAGT

60

AATTGCCCG

69

(2) INFORMATION FOR SEQ ID NO: 2771:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 52 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2771:

ACGATCATCT GGATGGATAT ACAGAACAGT GTGATTGTAC GTGGTGGGAA AA

52

(2) INFORMATION FOR SEQ ID NO: 2772:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 70 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2772:

TTAACAGTAT GATATTATCA CACGTGAATA GGATATGCCA ACACGGCAT CGTTGGGAT

60

AGCGTAATAC

70

(2) INFORMATION FOR SEQ ID NO: 2773:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 67 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2773:

AACATTGTAT TCGTGATTAA GACTTCGATC GGTTCAAGTAT TCGGCAGATC CACATGTGAC	60
5 CATGCTT	67

(2) INFORMATION FOR SEQ ID NO: 2774:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 120 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2774:

CACCCCTTGTG ATATCACATT TGTATGTGTT AAGAGGGAGC CCCTTTCCCG ATCAACTGGC	60
20 GATAAAAACA GTTGAnAAGT GGGCGGGGGT TATTATTTCT GATGACGGCG GGGTTTTTTC	120

(2) INFORMATION FOR SEQ ID NO: 2775:

- 25 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2775:

AACCGTTGCA GGThAAGCTG GGCnCACCAT TCTTCTCTAT TAATGGTTCA	50
--	----

35

(2) INFORMATION FOR SEQ ID NO: 2776:

- 40 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 57 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2776:

CATGTACGGT GTCCACACAA GAAGTATTAA GGTGGTTGTT CCCGGATTAA ACCTGGC	57
--	----

(2) INFORMATION FOR SEQ ID NO: 2777:

- 50 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 51 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2777:

AACGACCCCG GGTTCACCG GGGTCCATTA AGCCAAGGGC CAGGGGACCC C

51

(2) INFORMATION FOR SEQ ID NO: 2778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2778:

TTGTTCCGGC CTAAAAAATT TAAATTGAAC CCAAGGGTTG CCTTGGGTTG GGTAATCCAT

60

20 TTTTGAAATA AACCTTTGnC CCTAATGAAT TTTCCGCCA TTTAAAGGGT GTCCGCCAAT

120

CCGG

124

(2) INFORMATION FOR SEQ ID NO: 2779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2779:

GTAAATTGGA ATTACCGG AAAATTAAAGG AAAGGCCAGT AAGGGGTTTC CAGGCCAA

58

35 (2) INFORMATION FOR SEQ ID NO: 2780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2780:

GCACTCCAGC CTGAGCACCA GGGTGAGACC CTGTCTCAAG AACAAAAACA nCACACnCAA

60

AAAACTTGTT CAAAACTCAC TTCCCTGCAGT AATCTTCCT TGAACAAACT CACCCCTCTAA

120

50 TTCCCACCTG CAATTGTGTG TAGAAATCCA TTCTCGTGTG TAATTTGGG CTTATATGCA

180

CACATTGAAA ATCCAAGAGC CAGAAAGAGC TCTAAGGAAT TATCCAGTCC AGCTCTGTGC

240

AGCCTGGGCT AGGACCCAGA TCTTTCCCAT TTCCCTGTTC CAAAAATTTC nGGCACAGGG 360

TGGCCACCCCT G 371

5 (2) INFORMATION FOR SEQ ID NO: 2781:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 133 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2781:

GGGGTTGCCA AAGGGGTGTT AAATTTAAGT CCGATGAAAA TTAAGnAAAA AAATCCCATT 60

TTCCCTTCCG GGTCCGTTGT TGGGGCCTTA ATTTCCCGCC AATCCAAGTT TGGTGAATGA 120

20 AATTAATTAC CGT 133

(2) INFORMATION FOR SEQ ID NO: 2782:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2782:

GTTCAAGTTG ACGCTGGATC ATCTGGTACA CACGTATCCT GCATACTATA GATGTCAT 58

35 (2) INFORMATION FOR SEQ ID NO: 2783:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2783:

45 GCTAATTATA GGCGTCAGG CATTACGnGA TCGAATCTGG CAACTCACAA 50

(2) INFORMATION FOR SEQ ID NO: 2784:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2784:

GCCnCnCTCT GTGACACTGT GTATATAACAC CCGCGGGAAAT ATCTCCAACG

50

5 (2) INFORMATION FOR SEQ ID NO: 2785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- 10 (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2785:

CTTTGTCTGA CATATTGGGG CAGTGATTT TGGGACGGTT CTACATGTAG AGTACTTTAG

60

TCAGAGTTGT GAGTAGCGGA CGGGTnTACT TGATATAACCC TTAATGTGTA T

111

20 (2) INFORMATION FOR SEQ ID NO: 2786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- 25 (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2786:

CATGATGATA CTTGCATGTA CGTTGTACGT GAACGTACAG TTACGTTGTC

50

35 (2) INFORMATION FOR SEQ ID NO: 2787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- 40 (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2787:

TCAGCAAGTA GTAAGGATAT CAAACTATGA TCTATTGAT GTTATGCCAT AA

52

45 (2) INFORMATION FOR SEQ ID NO: 2788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- 50 (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

GCATCATGGA ATATTAAC AGCTGATAATG TTTGAGTAAT GATTGATTGA CGAGATATGC 60

GGCA 64

5 (2) INFORMATION FOR SEQ ID NO: 2789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2789:

TGAGAGAAAGT CACAGTCGCC AGCGGCAAAG AACCCGnnAA GATGTGnGCA 50

20 (2) INFORMATION FOR SEQ ID NO: 2790:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2790:

CAGTGTATGG AATCTTGTGTT GAGTGTGAGA GTCAAAGACT TGGTGATTGA ATGGAAAAAT 60

30 TGAA 64

(2) INFORMATION FOR SEQ ID NO: 2791:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2791:

ACAAAnGGGTG AAGTTCTCCC ACATGCTGTA TACCGTGGGA TTATTTTAA 50

45 (2) INFORMATION FOR SEQ ID NO: 2792:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

ATTCCTATTCAACACGGATACATAATCTTTATATCTTCCTTCTAGTCA TATGATACTG 60
 GAATAAGTGA TATTCTTAT AAT 83

5 (2) INFORMATION FOR SEQ ID NO: 2793:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 64 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2793:

CATATGTCAT CGTACGTAAT CATCGATGAA ATATCAACAT CTCGACTTAA TAGGTCAACA 60
 AGAT 64

20 (2) INFORMATION FOR SEQ ID NO: 2794:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 57 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2794:

CCCTACTCCG CGCAATAACC GCATTACCAAG ATGCGCTTCC ACTGAGGAAC GACGGAT 57

(2) INFORMATION FOR SEQ ID NO: 2795:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 65 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2795:

AGATAAAAGTG TCATCTATAT CCATCTATCA ATATAGATAT GTTTACGGCC GATTCAATC 60
 45 CGCAA 65

(2) INFORMATION FOR SEQ ID NO: 2796:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2796:

TATACGCCTC ATTACACCCA ATTGGACCCT TTACGTATGG AGTACATTAT AGAATCGA

58

5 (2) INFORMATION FOR SEQ ID NO: 2797:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2797:

nGCTAAGAAC TTATAAGAGG TTTCGGCAGA TATATATACG CAAGTATCTG

50

20 (2) INFORMATION FOR SEQ ID NO: 2798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2798:

AAGCAGTCCTT TCACAAAAAG TGAATAATCA CTAGTTCAT TAAATTGCATT TGAACCTTCA

60

30

TATAATGCAT ATTACTTAAT GTACAAGCAA AGATGTATTT ACCTATCAAA GAATTTnC

118

25 (2) INFORMATION FOR SEQ ID NO: 2799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2799:

CCATAGAACCG TGTGAATACC TATACATATC ATACTGTGGA ATTCTGTTACG AGG

53

45

(2) INFORMATION FOR SEQ ID NO: 2800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

CCAATTCAAGA CTGTTATTCT CTCCTCGTGA TAACCCGTGA TGTTTGTCTG C

51

(2) INFORMATION FOR SEQ ID NO: 2801:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2801:

GGGGGnGCAT ACCGCACCGA AGCATCAGAC GATGTGAGCG ACCTACCTCC

50

15

(2) INFORMATION FOR SEQ ID NO: 2802:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2802:

CCGTAGCGCA CATATGACGA GACCAAGGAT AACGTGCAAAn GnCATATTGT

50

30

(2) INFORMATION FOR SEQ ID NO: 2803:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2803:

CACGTCATGA ACGTGCATTC AACACAATCA TTTACGAGAT GGACCAAGAC

50

40

(2) INFORMATION FOR SEQ ID NO: 2804:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 126 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2804:

TATGGTGTTT ATTTTAGCGC TnGTTGTGCT TTGTCTTCAG CATCTATAAC CTAGTGCGAT

60

55

CTATTG

126

(2) INFORMATION FOR SEQ ID NO: 2805:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 88 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2805:

AAAAGCGCAT ATGGTGTTC TCTCATATCA CTCCAGGACT CAGCAGCTGG AAGGAGTTAA

60

15

GAAGTAATAA GGTGCCACCC TAAATCCA

88

(2) INFORMATION FOR SEQ ID NO: 2806:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2806:

TGGATCCGGT ACCAAATAGG GACTACCGGG AATGTCCCGG GGGGCCTAAT GCCGAATGGG

60

30

GCAACG

66

(2) INFORMATION FOR SEQ ID NO: 2807:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 66 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2807:

CCCGCTAACG TGGGGAAAGT TTTGAAGTTA AGAAGGAATG GATTCCTAAC GGGGCGGGGT

60

45

CCAAAC

66

(2) INFORMATION FOR SEQ ID NO: 2808:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2808:

ACAAAGCACT ACTGAACTGG TTTCGTTGGA GCCCCGTGTTG CTGTTTATTACCGGCA

56

5 (2) INFORMATION FOR SEQ ID NO: 2809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2809:

AGGGGGCGTA CAACATAGAT TTGCGAGATA CTCAGCATTAA CACTTCCATT TAACTTATTAA

60

TCC

63

20 (2) INFORMATION FOR SEQ ID NO: 2810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2810:

TTAGGGCCCT GTTCCAACCG CACCCATATA AGGCGGTGG CTGCACGCAC GACGTATG

58

(2) INFORMATION FOR SEQ ID NO: 2811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2811:

AAACCCCCAA GGAATTAAATT TTCCGGTTTT CCAACCCCTT AAAAAGGGAA AGGCCAAT

58

45 (2) INFORMATION FOR SEQ ID NO: 2812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

CATCATTAAG GCAAAAACCTT TCACAAAGTC ATGAGGCAGA AAAGGTATTA TTATAACACA 60
 TCCCGCGTTG GG 72

5 (2) INFORMATION FOR SEQ ID NO: 2813:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2813:

CCATTTAAAG CGGTACGGGG CTTGGTTCAG GAACGTCGTT AGACAAATTG GGT 53

(2) INFORMATION FOR SEQ ID NO: 2814:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2814:

TAGTACCCAA TTTCCAGTCG AACCAAGGATG GGACCAGAAG CCAAACCAAC GTT 53

30 (2) INFORMATION FOR SEQ ID NO: 2815:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2815:

GAAAAAAAAGG CCTTGTTTAC CAAAGGGGCC AATTTTTTCG GTTCAAGGTC CAAACCTACC 60

TT 62

45 (2) INFORMATION FOR SEQ ID NO: 2816:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TCTGAATGAC GCCGAAATCC CATCTGAATT CATGGGATTT TCCACTTTCA

50

(2) INFORMATION FOR SEQ ID NO: 2817:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2817:

CGTTACTAAA GCTACATAGT GCGTCATTTA AGATTATAGC AAGTAGCATA T

51

(2) INFORMATION FOR SEQ ID NO: 2818:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2818:

CATTCAACC ATATTCAATT GTTCCATTAG CATATCAGGC ATGTCACGTG CACA

54

(2) INFORMATION FOR SEQ ID NO: 2819:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2819:

GTGTATCAA TGAGCATGTT nCAATGGTTC AnCATGGCGT TTATGGCACT

50

(2) INFORMATION FOR SEQ ID NO: 2820:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2820:

ACAATTGCGG CTGCTCATTG TGAGCACGAC TTTATCATGG TTGGGTTCA

50

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 102 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2821:

CAGTAGTACG TAAAAATGAA TCACTTGAAG ATGCGTACGT AGATTTAAA CGTCAGTTCT	60
AAAAAGTGGA CAATCCAAGA GACGTAACGG AATTTnCGAA AA	102

15 (2) INFORMATION FOR SEQ ID NO: 2822:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2822:

GAGTACTTAA TCCGGCACCG TTTACTTCTG GGGGCATCGA CTAAGTGGGG CGGCC	55
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25 (2) INFORMATION FOR SEQ ID NO: 2823:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 71 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2823:

ATTGGTTCT CATAAACACT TTTCTATGAA TTTGTATGTA TTTGTTTATT AAAATCTCTA	60
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ATTCTTATGG A	71
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40 (2) INFORMATION FOR SEQ ID NO: 2824:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 134 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2824:

CCATTGAGTG TGAGTATATC ATCGATCAAT ATGCAACATT TATCAGGTGC ATGTTGCTTA	60
---	----

TGGATAATTG AACCA

134

(2) INFORMATION FOR SEQ ID NO: 2825:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2825:

15 CCAGAACATGAT GAGCTACAGG ATCAGCCCCAG ATATGCAGGT AAACGGGCCA ACCATTG

57

(2) INFORMATION FOR SEQ ID NO: 2826:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 89 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2826:

CAATAATGCT GAACAGCAAC GCATCTCATT CTAAAATCGC TCAGAAATCAC ATCCCATGCA

60

CACATAATAA GTGGCACTTA GCTTAAAAT

89

30 (2) INFORMATION FOR SEQ ID NO: 2827:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 64 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2827:

CGGATTAGTG GTGTAAACTG GGTGACCCAT ACCACACCTC GCGTGTTGTG AAAAAAGGAC

60

TTAA

64

45 (2) INFORMATION FOR SEQ ID NO: 2828:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

TATACAGAAA ACAGCGTGCC GTTATCCATT ATCACATGAC ATATGTAGTC C

51

(2) INFORMATION FOR SEQ ID NO: 2829:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2829:

GAGATACGGT CTTCGTATAT GATATGTGCA TATTTAGATA GTCATTTATG AGAGAACGTG

60

15 GACGTGAG

68

(2) INFORMATION FOR SEQ ID NO: 2830:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2830:

TGATGATTGT TTATGATACG ATATGAAAT GATAATCATC CAGGAGGTCT AGCATGGT

58

30 (2) INFORMATION FOR SEQ ID NO: 2831:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2831:

CCTAACAAAC ATAATTAAC CCATAAATGC ATCCAATGCG GTTAAACCAT GAAA

54

(2) INFORMATION FOR SEQ ID NO: 2832:

45

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2832:

55

(2) INFORMATION FOR SEQ ID NO: 2833:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2833:

GTCTGCTACC CTTTCAGAGC AACATGCTGA GTGTATAATG CCGTGTATAG GGGACAATGC	60
CATTCACTA	69

15 (2) INFORMATION FOR SEQ ID NO: 2834:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2834:

AACACCAGCT GGTAAGTATC ACGTTACATT TTGTGTCTTC ATGATTAATA AAAAC	55
--	----

30 (2) INFORMATION FOR SEQ ID NO: 2835:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2835:

AGAGCTTGGGA TGTCGTTCGT ATTGATGCT CTAGCTCCAT GGGGCCATG	50
---	----

45 (2) INFORMATION FOR SEQ ID NO: 2836:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2836:

TTTCGTCACT ATTGCTCATG CATAGACATT TGCAATACCG GCAAATGACG ATGGnATATG	60
---	----

TTAATGGTCA ATACAGGG

138

(2) INFORMATION FOR SEQ ID NO: 2837:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2837:

15 GTTGGCAACT TCAGTCGCTA CTTAACGCA TCTCACAGTC CTCCCTCCAA AGAGAACGTA

60

T

61

(2) INFORMATION FOR SEQ ID NO: 2838:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 78 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2838:

30 ACGTGAATCC CGTGAGGCCA ACAGTGATTG GGATAATTAC ATGGATGTTT GACTAATGGT

60

CATTCACACC CAGATCAG

78

(2) INFORMATION FOR SEQ ID NO: 2839:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 90 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2839:

45 ACTTAAAATC TCCTCTTGCC TAACTTCCAC ATTCTTATCG ATATGAATAC ACCATACTT

60

TTATAGATAA GTTGATGTTG ATGCATATGT

90

(2) INFORMATION FOR SEQ ID NO: 2840:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 61 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2840:

TATATTTAGT CTGTTATACA AGGTGTATCA CAGCGGTAAT ATGCCTCTAC ATGGCCATAT 60

5 G

61

(2) INFORMATION FOR SEQ ID NO: 2841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2841:

GGGCCCGGCGC GGCAGGGAGG AAGGGGGCAA GGGCGGCGCC AAGACCACGA CGGGCACC 58

20 (2) INFORMATION FOR SEQ ID NO: 2842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2842:

30 TGTACAGGTG CAGTTAGACC GCCTGACGGA ACGAGACGTG CAATTGCCAG CAACGCACAA 60

(2) INFORMATION FOR SEQ ID NO: 2843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 62 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2843:

AACATGTGA AGTGATCGAG GTATGGACGG AGTAATGATC GCACAAGACA TAGCATCCCC 60

45 GT

62

(2) INFORMATION FOR SEQ ID NO: 2844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2844:

ACGATTTAGT TTGAATTCT ATTAGGGTTT GGTGATTCTA CTACTTCTGA TA

52

(2) INFORMATION FOR SEQ ID NO: 2845:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 63 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2845:

GATTATCACCA ATTATGCAAA GTTGTCTAAT CGTTAGACCA ATTTCTGTTC AAACACCACA

60

ATC

63

(2) INFORMATION FOR SEQ ID NO: 2846:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2846:

CGTTATATAA GAnCGACATG GAAGCATGAT GAAATATTGA ATACATCATA

50

(2) INFORMATION FOR SEQ ID NO: 2847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 51 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2847:

CCACAGGTGC ATCCGCCTGG TATGGAGCCG GCCAGTCITTC ACTGCTTTCA C

51

(2) INFORMATION FOR SEQ ID NO: 2848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 113 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

5 AAAACTGTCC CAAGCTGTTT TTATTTAGAG CAACCAATCC AATTTAAACC CCCCACCAATT 60

ATTTTAAATA ATACCATTCC AGCGAAAGCC CTTTCCAnGG TTTTGGAATA TAA 113

10 (2) INFORMATION FOR SEQ ID NO: 2849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2849:

CATCTGGAAC TTTTTAACCT CAGAAGGGTT CCAGAAGGTT TCGAAATCCC TCCTAATGGG 60

CTCCATTAAAC GGATTTAAA TTTTTTAATA ATTTTAGGCC AAAAAATTAA TTTCCAGGAA 120

20 AAGTAAGTTT CCAACCCGGG TAAGAAATTAA CCnAA 155

(2) INFORMATION FOR SEQ ID NO: 2850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 64 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2850:

CACAAACTAA CATAGAAGGG CCATCATCAG GTGCTATTAA ATATCTACGC TAGATTGTAA 60

ATCA 64

35 (2) INFORMATION FOR SEQ ID NO: 2851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2851:

AATTATTTCAT CAATAGCTCT TTACGATTCA CAAATCTAGG TACTTTTCAG ATCT 54

(2) INFORMATION FOR SEQ ID NO: 2852:

50 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 58 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2852:

AAGCCCCTTT AAACCTGGGCC TTTAAGGAAC GGTGGCGAAA ATCCCCAAAT TCCGGGCA

58

5 (2) INFORMATION FOR SEQ ID NO: 2853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 103 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2853:

AAAGGGTTCC ATTCCGGTCCC ATTAAGATT TTGTTGAAAT TCCATGGAAG GATGGTTGGT

60

CCTTTAGGCC TGGTAGGTTA TCCTTTTGAG AGGTGGTATC CAG

103

20 (2) INFORMATION FOR SEQ ID NO: 2854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 55 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2854:

GGCCACGGTC ATTCCCTCAA GCCAACCGAT GGACAAGATG GGTGGAAGGC GCAGG

55

35 (2) INFORMATION FOR SEQ ID NO: 2855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2855:

TATTTGGCAT TCAAATAACG TAAACGGATT TTGAAGTAAT TTACATAAAG AGG

53

45 (2) INFORMATION FOR SEQ ID NO: 2856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 53 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2856:

ACAATTTGAC AATGACTGGG ATGCTGACAC TTGATATGAA GACAATTGAA GAT

53

5 (2) INFORMATION FOR SEQ ID NO: 2857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2857:

AACTGCGTTA CATGCTTGC TTTTAAGTGA ACCCAGAACCA ACGGTTTCGG

50

(2) INFORMATION FOR SEQ ID NO: 2858:

20 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2858:

30 CTTTnnTAnC TTCATCTCTA TTATTATTGT CCGAATTACT ACGTGGACAA

50

(2) INFORMATION FOR SEQ ID NO: 2859:

35 (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2859:

TCCAGGTCGA ATTTATTGCC AATTAGCCTC CCGGGTTAAA AGGGTGGGTG TCGGGTAAAA

60

TCGTAC

66

45 (2) INFORMATION FOR SEQ ID NO: 2860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 72 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

55

GGTATCCAGT CCCCCGGAGG GGTGACAAAC TTCCACGCC AGTGGGGGGA CTACCGTTT	60
GGACCAAAGC CC	72

5 (2) INFORMATION FOR SEQ ID NO: 2861:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 58 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2861:

AGTGTCGAAC ATTAAAGAT ATTGAGTGAC AGGATTGCTT AAGGGCCGGT CGGAACAG	58
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20 (2) INFORMATION FOR SEQ ID NO: 2862:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2862:

TTAGCGGTAA ATCCGAAGAA CTAAGAAGAC GTCAAGAAGG GGATATAACGC	50
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30 (2) INFORMATION FOR SEQ ID NO: 2863:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2863:

GCAAAAnTGA GAGCTCAAnC TGCAAnAAGC AAATCACCGA AAGATTAGGT	50
--	----

45 (2) INFORMATION FOR SEQ ID NO: 2864:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2864:

AACTATTCTG GATTGTGCA GTGGCTATGG GGATGAGTG C TTCCCCTCT TTCATGACGC 120
 AGCGAACGC CAGCAACGCA ACCACTGATC AATGCTGAGC CAGCTGTAGC CGCCCAGACG 180
 5 GAACAAAATC CGCAGTGGGG GCAAAGTGAATG CCGGGCGTGC AnGGCGCTGA TGnCAGTCG 240
 TGGCAG 246

10 (2) INFORMATION FOR SEQ ID NO: 2865:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2865:

25 ACAGATGATA CCTCTTGATC ACTTGCCAGA GATCGTCTAA GTCGTCCTTG

50

(2) INFORMATION FOR SEQ ID NO: 2866:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2866:

40 AATACCACGC TGACCTTAAT AAGCCATCAT GGGGAAATC ATGACCGCAA T

51

(2) INFORMATION FOR SEQ ID NO: 2867:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2867:

55 CAACTTGGTA AGTGGTCGTT TTGGGCCCA CCCTACCCGT TTGGACCTGG

50

(2) INFORMATION FOR SEQ ID NO: 2868:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 223 base pairs
 (B) TYPE: nucleic acid
 55 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2868:

5	CCCAACCCGG TTCCGGGCCT TAATTTTn CCTTTAAAG GAAAAAAAGG AAAAACCGGT	60
	TAATTCCGGC CCAAAAnCC CGGAAGTTGG AAACCTTTT TTAATAAAA TAATGGACCG	120
	TCCAACCTT TGTTGCCAAA AGGTGGCCTA AAGGTTAAA AAAAACCGTT AAAATCCATG	180
10	GCCAGGATCC AGCCTAAAT TGAAACCATT ATAATTGATA AAC	223

(2) INFORMATION FOR SEQ ID NO: 2869:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 66 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2869:

TGGACCTTG GTAATATGAA TTGAATGGTG CTTTGTGGAA ATCGGGATT CGCCTCGTGC	60
CTTGTA	66

25 (2) INFORMATION FOR SEQ ID NO: 2870:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2870:

AAAGCCAnG ATCATGGTAT ATCCATTAAG AGACGAGAAG ATCGATGCC	50
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(2) INFORMATION FOR SEQ ID NO: 2871:

- 40 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 125 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2871:

50 TTATTTGGAC TTACAAGGAG AATAGTCAnT TCTAGGAAAG TGGTGCAGAA GTCACTTACC	60
AATATAACGGG GATTATTCAAT CCATCGTCGG TCGGTCAATAT GATAACGGAAT TAACACGCCA	120
CTCCG	125

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2872:

CAACACCTGA CGTGTATAGA ACTCATCTCT TCAAATAACGT CGCTGTCAGG TTACCGAAGTC	60
GA	62

15 (2) INFORMATION FOR SEQ ID NO: 2873:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 54 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2873:

TATACATTCC ATTTAACACC TTAACACATG CAAGTTACTT CCTCCTCAAG CATC	54
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26 (2) INFORMATION FOR SEQ ID NO: 2874:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2874:

GCTGAAAGGA GACTTCTGCA GGTGTGATCA CAAACTGCAC ATCTACACAA GCCATT	56
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40 (2) INFORMATION FOR SEQ ID NO: 2875:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 112 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2875:

AGCGCGACCG CGAGAAAGGGA GGGGGAGCCA GAGCAGCAGC AGGCCCGAGG GCGAAACCCC	60
CAAGAGGAGC GAGnAAGAAG GAGGGAAAGC CCAGCAGGGG CGCCCAGGCC AG	112

- 5 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2876:

GnGCGTTnnA nCGGTGCGGT AGAGATGTCG GGTCTGTAGT AGATCTGGGG

50

15 (2) INFORMATION FOR SEQ ID NO: 2877:

- 15 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2877:

ACCTTGACTT TGCAGACGAT GATGCTTTG GCTGGATCT TCACCATCTG GCAACTGAAT

60

25 ATGGTTGG

68

25 (2) INFORMATION FOR SEQ ID NO: 2878:

- 30 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2878:

CTCCACCTGA TGCATGCCCT CATATCAGGA AAATGATAAC CTCGGACACC TTC

53

40 (2) INFORMATION FOR SEQ ID NO: 2879:

- 45 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2879:

GGGAACCTTG ATCTGCCCTT GAAATCCTGA AAAATGTTTG CAAACGGGAA TGATCTGTG

60

55 CCTTGCTTTG AATGA

75

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 341 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2880;

AGAGAGGCCG AGATGGCAGA TGAGATTGCC AAGGCTCAGG TCGCTCGGCC	TGGTGGCGAC	60
ACGATCTTCG GGAAGATCAT CCGCAAGAAA TACCAGCCAA AATCATTITTT	GAGGATGACC	120
GGTGCGCTTGC TTTCATGAC ATTTCCCTC AAGCACCAAC ACATTTCTG	GTGATACCCA	180
AGAAAACATAT ATCCCAGATT TCTGTGGCAG AAGATGATGA TGAAAGTCTT	CTTGGACACT	240
TAATGATTGT TGGCAAGAAA TGTGCTGGG ATCTGGGCCT GAATAAGGTT	ATCGAnGGTG	300
GTGAnTGAAG TTCAGnGGTG GACATCCGTC TATCACGTTTC A		341

(2) INFORMATION FOR SEQ ID NO: 2881:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2881:

GC GG TT ACT G TGT AAT GGC A **TT AAA ATAT GA** AAC GAG CC GA **TGG AGC GTT G** 50

(2) INFORMATION FOR SEQ ID NO: 2882:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 81 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2882:

CTCATCATTT GTAGTTGGAA AGGTTTATGT ACATTTGGAA AACACCGACA CATGACGTAT 60
CTCCATTGCA ATTTACACAA G 81

(2) INFORMATION FOR SEQ ID NO: 2883:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 77 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2883:

5 TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT 60
 TTTTTTTTTT TTTTTTTT 77

(2) INFORMATION FOR SEQ ID NO: 2884:

10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 104 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2884:

20 ACGGTGTGCT TGATGCAC TT GGAACTGTGA GTTTGGGTGT GACTTGCTT TGGCTTGCTT 60
 GCTGAATGTT TTGACTATGC ATTGCGTATA TGACTTGnAG CGCG 104

(2) INFORMATION FOR SEQ ID NO: 2885:

25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 127 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 30 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2885:

35 AGCAACGTGT CTGTCACAGT GGTGTCAATTG GAAAAGGCGT CATGTATTGn CCGGTGGGAT 60
 TTACGTGTAG TCACACATGT GCCCAATTAT TGTTTGAGG CCAACTTGAG TAGGTTGATG 120
 GTTATGTT 127

(2) INFORMATION FOR SEQ ID NO: 2886:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 45 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2886:

50 TGAGCGAGTG CTGTGTGAGC GCGAGGTTGT GAGAGTTAGA ACCTTGTGAG C 51
 (2) INFORMATION FOR SEQ ID NO: 2887:

55

- 5
- (A) LENGTH: 63 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2887:

10	TTGAAACCGC GAACCTGAGT TCTGGTTAAC TACAGTCTGG TATACACATT GAGGGAAACT	60
	TCG	63

(2) INFORMATION FOR SEQ ID NO: 2888:

- 15
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 50 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- 20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2888:

25	AGTAnCATAC nCAACTATCT CAGCATAACAA TATTGGnCAC CTCGCAGCTT	50
	(2) INFORMATION FOR SEQ ID NO: 2889:	

- 30
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2889:

AAA	nATAATC CCGGTTTTAT CCCCTACCT AATTAGTGGG AAAAGTACCA ATTGCCAATT	60
	GGTAAAATAG GTTGCCATAA CGGCCTCCCA AAAGTAAATT CCCTTTTTG GTTTA	115

40

(2) INFORMATION FOR SEQ ID NO: 2890:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 147 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2890:

ATCGGTCCG TTATACTCTT CATAATATTG TGGCGCAACC ATTTCAACTT TATCTTTCT	60
TATAAAATAGC ATCATCGCAA TAATAAAGAA TAATATCGGA ATGATTAAG TAACGATAAG	120

55

(2) INFORMATION FOR SEQ ID NO: 2891:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2891:

AACACAACAA GTTGTAAAG ATGCATTTT ATCACAAACAT AAATCTATTG GACGTAAAGC	60
TCAAGAAGCA TACTTATCAT ATCGTTAGA ACAAGAGTAT AGTAAAGATG ATATCTTCCA	120
AGTATATCTA AACAAAATTT ACTATTCTGA TGGCGTAACA GGTATTAAAG CTGCTGCTAA	180
GTATTACTTT AATAAAGATT TAAAAGATTT AAACCTTAGCG GAAGAAGCTT ATTTAGCCGG	240
TTTACCTCAG GTTCCAAACA ACTATAATAT TTATGATCAT CCAAAAGCTG CTGAAGATCG	300
TAAAAnCACT GTTTTATACT TAATGCATTA TCATAAACGC ATTACAGATA AACAGTGGGA	360
AGATGCTAAG AAAATCGATT TAAAAGCGAA CTTAGTAAAT	400

(2) INFORMATION FOR SEQ ID NO: 2892:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2892:

CCTAATTAAA CCTCCATCCA TCCTTTGAA GGGGGATCTT TAATAAAnCC GGAAAGTTG	60
GGGGAAAAAT CCTCCATCCT TTGAAGGGGG GGGCTTTCCA ATGGCCTTTA AGAATGGCCT	120
TTTCCAAGCC AACTTTTAAT TCCCCCGGT	149

(2) INFORMATION FOR SEQ ID NO: 2893:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 130 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2893:

CCCCGAAAGTA TTCTTGTAAG TATTATGATA CTCGGTnCTT TTTATGATTG ATGTTAATTT 60

TTATGTTAGT

130

(2) INFORMATION FOR SEQ ID NO: 2894:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2894

GATGAGACCT GAATTGATTG CAACCCAAAT CGGCATATGC AAATTGCATT AAAGTTGGT

69

CAACCG

65

(2) INFORMATION FOR SEO ID NO: 2895:

20 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 102 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2895:

CGCACAAACAC ATTTAGCGAC TCAGATGTCG CGCGAATGGA CCGATATGGC GTGTCTACAC

- 60

ATTCGTCAATAT TGTACGAATA GATGAGAANT TGCAGAACCCG C

183

(2) INFORMATION FOR SEQ ID NO: 3896:

35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 69 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3886.

ATTAAGTGAT GGGCTTAATGT TTACGGCCCCA ACCAAAGGTT TCCAAAAGAGC CCTTGTGTGGG

50

CONTENTS

166

(3) INFORMATION FOR SEQ ID NO: 3887-

50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 80 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2897:

ATTGAATTAA TGTCCCAACC AAACGAATGG TTGCCCTTTT TCCATCCAAA GGGGGCTAAT 60
 5 TGGGAAGGGT ATTGGTTCCC 80

(2) INFORMATION FOR SEQ ID NO: 2898:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2898:

CAAATCCTGG AGATGAGCGT AACCAAAAAT AACGTTGAGA AAATGACCAC ACA 53

20 (2) INFORMATION FOR SEQ ID NO: 2899:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 51 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2899:

ATCGTGAACC TCTCATCCAA TCACTCATGT GAGTGAATTG GATGACCTGA A 51

35 (2) INFORMATION FOR SEQ ID NO: 2900:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 52 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2900:

AGCTTTCAAGG GCTATATCAG ACCCACGCAT TCATCCACGT GAATGAAACA CG 52

45 (2) INFORMATION FOR SEQ ID NO: 2901:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GGTACTGACA GAGGGACAAG GTGGAAAGGn TGCCAATGTA AGAATAACGGT

50

(2) INFORMATION FOR SEQ ID NO: 2902:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 72 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2902:

15 TGTCTGGAAT TCAGGTGAAT TGATGCGGAG ATTTAGGTGA TTAAGGAGTG TTGATTATGA

60

AGATGACCAC TT

72

(2) INFORMATION FOR SEQ ID NO: 2903:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2903:

30 CATGCCAAAG CAGTAGGCAA GCCGCTTAGC AAGCCAAAAA CGTCAGCCCCA

50

(2) INFORMATION FOR SEQ ID NO: 2904:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2904:

TTGATGTTAC CTGATCGCAA TCTTGACCAC CTGGCAGGGT CTCATTGTTG GGTATCGA

58

45

(2) INFORMATION FOR SEQ ID NO: 2905:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 69 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2905:

GCGGTCTAT

69

(2) INFORMATION FOR SEQ ID NO: 2906:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 53 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2906:

15 ATTCCATTAG GTTCAATTAA AAATTAACGG GGTTATGGTT CCGGTAATTC GGG

53

(2) INFORMATION FOR SEQ ID NO: 2907:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 57 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2907:

AAAGCTAAGA AAGGAGGATT AGCTGGTAGT GGAGGAATGT TAAGTGAGGC TGGTGAT

57

30

(2) INFORMATION FOR SEQ ID NO: 2908:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 86 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2908:

40 GGGAAATGGCG CATGAAACGTG CACATCAAAT GACACTGCAG GAAATCAATT AGCACGGATA

60

TGGCATAAAG ACAATGGTAA AAGTGG

86

45

(2) INFORMATION FOR SEQ ID NO: 2909:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2909:

55

(2) INFORMATION FOR SEQ ID NO: 2910:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 109 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2910:

GAATTTGTTC CGAGGTATCG AGGACTACGC TTATAAGGTG CTTACAGATA CATTAnCAT 60

15 TAATGGCGTG TGCTGCTGTA TGGGTTATAC TGTTCACAGG TTTAAGAGA 109

(2) INFORMATION FOR SEQ ID NO: 2911:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 60 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2911:

TTGTCCCCAT AGGGAGAAAT ATTCCGCCT GGGCAAAACC AAATCCACGA GCTTCTAAGG 60

30 (2) INFORMATION FOR SEQ ID NO: 2912:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 55 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2912:

TAGATGTATC CAGCTGACAT TAGCTATTGG TAAGGTAACG GCTTACCAGG CAACG 55

(2) INFORMATION FOR SEQ ID NO: 2913:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 123 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2913:

55 GCCATGAGGC CCACCCATCC ATGTTTATGG ATGGTGGATT GGGGAATTAC TTGTTTCAAA 60

TCA

123

(2) INFORMATION FOR SEQ ID NO: 2914:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 58 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2914:

15 ATCCGTAATT CTGGCCTACC AAGGGTTAG GCCAATGGGC CATTCTTTA TTTAACCC 58

(2) INFORMATION FOR SEQ ID NO: 2915:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 50 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2915:

TGGTGCGACA GTGGTAGGCT TTTTACGGTn TGChGGCGAG AGTTCTGTAG 50

30 (2) INFORMATION FOR SEQ ID NO: 2916:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 68 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2916:

CTGTTACGCT ATGCCCCCCA GTTGTATGTT GAGTGGAAATC GTGTTTTTCG ACCTGCCTTT 60

GCTTTTTT 68

45 (2) INFORMATION FOR SEQ ID NO: 2917:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2917:

GGAAA

65

(2) INFORMATION FOR SEQ ID NO: 2918:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 101 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2918:

15 AAATTCCAAT CCTGGGAATG GGATTCCATG GTnTCGGAA AAATCCGCCA CCCCCAAAAAA 60
 ATAAATGGGT CCCTTCCCTT GGAAATATTA CCTTTACCAAG G 101

(2) INFORMATION FOR SEQ ID NO: 2919:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 75 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2919:

30 TAATAAATCC ATGACCACCG TCACGACGAT CTGACTGATA AACTAATGAC ATATGACTGG 60
 TGTACACACC GTATG 75

(2) INFORMATION FOR SEQ ID NO: 2920:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2920:

45 CTTGGATTGA CCATCATTAG TTTTGGTCAC TCTAAGTTGT ACTGTCCGTT GTACAA 56

(2) INFORMATION FOR SEQ ID NO: 2921:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 65 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

GCTCATTGCT TGTATATTAA TCCCTGAAAT TGACCGTGT A TATCCCGTCG ATCTATCTTG 60

TCCTG 65

5 (2) INFORMATION FOR SEQ ID NO: 2922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2922:

GCAATATTCT AATCTGTATG TTACAGCACA TGGATATAGC ACATCCGGGC 50

20 (2) INFORMATION FOR SEQ ID NO: 2923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 54 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2923:

TGTGATTAA CAGGATTACA CAGGTGTACC AGCCGATAGT TGATTAAGCT TCTT 54

30 (2) INFORMATION FOR SEQ ID NO: 2924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2924:

ATCCTGGGAA GTGCTGAAAA ACCACTnCAC TAAAGGCATA GGAnCCACAC 50

45 (2) INFORMATION FOR SEQ ID NO: 2925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2925:

(2) INFORMATION FOR SEQ ID NO: 2926:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 62 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2926:

TTGGTCACAT TTATTCTCGT GTTGTGCCGT TCTTCTTCAG TACTAAAGAC AAGGTGATTC	60
15 GG	62

(2) INFORMATION FOR SEQ ID NO: 2927:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 56 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2927:

CAAAAGGCTA TCCCACCTGA TTIGCAAAAG GAACTGGACT GCAAGGGAAG TCTCAG	56
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30 (2) INFORMATION FOR SEQ ID NO: 2928:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2928:

40 TGATCTTGCT ATTTAGTTGC GGCTTGGATT CATTGGCAT GGTTAACAGATT AAATTAGATG	60
CTTCATTCAT TCAAGATTTC TTCATGTTAG CATTCTTAC GACAATCGGT CTTGGTGCAT	120
45 CATTGAAATT ATTTAAATTA GGTGGCAAAG TCTTGCTATT ATACTTTATG TTTTGTGCTA	180
TCATTTCACT CATTCAAAAC ATAGTTGGTG TATCACTAGC AAAAGTATTA AATATTAAC	240
CTTTGTTAGG ATTAACAGCA GGTTCCATGT CTATGGAAGG CGGTCAATGGT AATGCTGCTG	300
50 CTTATGGTAA GACAATTCAA GATTTAGGTA TTGATTCGGC ACTGACAGCG GCTCTTGCG	360
CTGCAACTTT AGGTCTTGTA TTTGGAGGGC TATCGGTGGT	400

(2) INFORMATION FOR SEQ ID NO: 2929:

- 5
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2929:

10	CTGAACCGAT GGCGCACTTT GCTACGCCAC CTACAGCAGA TCCCAnGGGG GGnGAAGCTT	60
	ATACTGAAGC TCTACGTTCA ACATTTTCC ATTGGGGATT CCATGCTTGG GCTGTTTATG	120
15	GTGTTGTTGC GTTACGTTTG GCATATTGCG AATTCCGTAA AGGTGAACCA GGTTTATTAT	180
	CTAGAACCTTT ACGTCCTCTT TTAGGTGATA AAGTAGAAGG TCCTATTGGG ATTTTTATTG	240
	ACGTTTTATC TGTATTTGCG ACAATCGTTG GGGTAGCCGT TTCGTTAGGT ATGGGTGCTC	300
20	TACAAATTAA TGGTGGTTTA CATTACTTGT TCAATGTTCC AAACAATAAG TTTGTACAAG	360
	CGATTATCAT CATTGTTGTT ACTATCTTAT TTATAGCAAG	400

(2) INFORMATION FOR SEQ ID NO: 2930:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2930:

35	ATGTAGATCT ATATGATGAC TTTTTACAAG ATCCATCATC TGTACCAGAA GATTAAAGT	60
	CTTATTCAAG ACAATTAAGA ATGATGACTC AATTGTACCA GCTTTAAAAA GTACAAGTAG	120
	TCAnAATAGC GACGGCACAA TTAAGCGTGT CATGCGTTA ATTGATAATA TTGCCAATA	180
40	CGGGCATCTT AAAGCCGATA TTTATCCTGT AAATCCTCCA AAAAGGAAAC ATGTACCTAA	240
	ATTAGAGATT GAAGACTTTG ATTTAGATCA ACAGACTTTG GAAGGTATAT CAGCAGGAAT	300
	TGTTTCAGAT CACTTTGCCG ACATTTATGA TAATGCCTAT GAnGCAATTG TAAGAATGGA	360
45	AAAACGTTAC AAAGGnCCAT TGCAATTGAG TATAACChTAT	400

(2) INFORMATION FOR SEQ ID NO: 2931:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

5 GGTTATACAA TCTAGAATCG CATGATAATT TAATGCTACA AATCGATAGT ACAATATATC 60
 TACCGTGAAT AACTGTGCAA ATAGTGACGT TGTAGCCGCC ATACGCATTT CATTITCATC 120
 AGTTCTGCCA TAAATCAATG CATACTCTGC AATTGAGCC ACTGGATTAT TAGCTGTACT 180
 AGATATAGTT ATGATGGAA TACTGTAATG TGTGGCCACC TGTGCAATTG ACTGCAATTG 240
 10 ACTATGGACT ACCTTGGATT CGTCACAAAA ATCATGCAAT CTCTATCATC ATGCGTCGCA 300
 AATGTTGACA CAAGTGAAT GCGTTCCAT GTAATAACCT GACATTGAA GCCATACGAG 360
 ATAACCTTGG AAAAAGATCA CCAATAGnCC AACTCGATGG 400

(2) INFORMATION FOR SEQ ID NO: 2932:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2932:

25 CTTTCAGTAG CAGCTACAAT TGTCTTTAAC ATTTAAGTTT AAAGCTGTAT GTGTCAACCG 60
 CAAATACCGA TAGCCATTCA CTAATGAAGT TTCAACTAAT TTAGTACGAT CTGACAATAA 120
 30 CTTTTGTAA TCTTGGGCTG CTTCAAGCTGA TACAGCAATA TTTCTCATTG TTTAACAGC 180
 TTCTTCAGGA TATAAACCGAG CAGCAGTTTC ACCAGATAAC ATTACTGCAT CTGTACCATC 240
 ATAGATTGCG TTGGCACACGT CACTAGCTTC TGACGTGTA GCACGTGGGT TACGTTGCAT 300
 35 AGAATCTAAC ATTTGTGTAG CTGTAATAAC TGGTTTACCT AATTTGThAC ATTGTCIGAT 360
 TAAATCTTTT TGAACCATTG GGACTTTnTC AG 392

(2) INFORMATION FOR SEQ ID NO: 2933:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2933:

50 TGACTATGGT ATCGCATGTT GTGTATCAGC GATGACAATT GGTAAACAAA TGCAATTCTT 60
 CGGTGCACGT GCGAACCTAG CTAAAACATT ACITTAACGCT ATCAATGGTG GTAAAGATGA 120
 AAAATCTGGT GCACAAAGTTG GTCCAAACCT CGAAGTATTA ACAGCGAGTA TTAGAATATG 180

ATTAATGTT ATTCACTACA TGCACGATAA ATACAGCTAT GAACGTAATT GAAATGGCAT	300
TACATGATAC AnAAATTGTA CGTACAATGG CAACAGGTAT CGCTGGTTA TCAGTAGCAG	360
CGGACTCATT ATCTGCATTn AATATGCACA AGTTnAAACC	400

(2) INFORMATION FOR SEQ ID NO: 2934:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2934:

AAAATATGCC ATGACTGGCA TGACAAGAAT TGGACGTTAG AAGCATCTCA AACTGGTACG	60
TTCAGAGGTC GTAACTnTAA CTTCAATGGT GAAGGATTCT CACGTCAAAC ATTTAAAGTA	120
AATGCCGTTA GTCAAAAAGA CTACGACAAA TGGGTGAAAG AAGTTAAAGG TAAGAnAACG	180
TTAGATCAAG ATACATTTGA TAAACAATTAA TTACCAAGCA CACCTAATAA AGCTTTAGAA	240
TTTAATGGTA CACATATGGC GTTTGTTGAT CCAGCAGCCG ATCCAGAATA CATCTTCTAT	300
GCATATAAAC GTTTCAATTG CGGATTGAAG GTCCCAAAC TCACTAGTGA GGAAAATATG	360
TTTAAGGTGT ATCAGACAAA CCCTTAATAC CTGCTCGTGA	400

30 (2) INFORMATION FOR SEQ ID NO: 2935:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2935:

ATGGAGTATA CAACTACTTC GGCATTGGCG CTTACGACAA CAATCCTAAC TACGCAATGA	60
CGTTTGCAAG GAATAAAGGT TrGACATCTC CAGCAAAAGC AATCATGGC GGTGCTAGCT	120
TCGTAAGAAA GGATTACATC AATAAAGGTC AAAACACATT GTACCGAATT AGATGGAATC	180
CTAAGAATCC AGCTACCCAC CAATACGCTA CTGCTATAGA GGGTGCCAAC ATCAAGCAAG	240
TACAATCGCT AAGTTATATA AACAAATCGG CTTAAAAGGT ATCTACTTCA CAAGGGTAA	300
ATATAAATAA AGAGGTGTGT AAATGTACCA AATAAAAGAT GTGAAACGAG AATTAAAAAT	360
GATGGTGTG ACTTAGGTGA CATTGGCTG TCGTTTTACA	400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2936:

AAACAATACA AACAAAAGAA AGTCACCAA GGATGGATTCTATTTAAT CCTTGGTTGA 60
CTCTTATTT ATTAAATTG TAGAACCTAG AAAATAAAGT TTAATTAAAA GCACCAATCA 120
TTTCTACTTT GAAATCTAAG GTTCTAAAA TAGCAATGAC TTCTTATA TCGGTTGTAA 180
TTGCAGAACTC AGCCTGAACG AAAAATCGAT ACATACCTAA TTGTGTTTT AAAGGACGAG 240
ACTCAATCCA GGGTAAATTAA ATATTAAACA AAGCAAATGT ATTAAGCACA CTTGCTAACCA 300
ACCCGGGTTA TCATGCATTG GTGTAATTAA AAACATCAAT GGTGTCGCAT TTTGATCAAA 360
TGCTGCTGAT TTGTTATAAC TAAAAACGTG TCAGGTTATGT 400

(2) INFORMATION FOR SEQ ID NO: 2937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2937:

TTATTATCTT GATA CATTGA GTGTATATTC CATTTCCAT GAGGC GTTAA ATAACGCATA	60
CCAAAGCATC TGT ACCCACCT TTA ATTTCT TATCTCTATT CCCAAATACC ATTGGCGGCA	120
ATGT CGGT TT ATATACTGGT AAGCTCTCCC CAAATTGTTG GAAAACITCG TGATCCACAT	180
AATAACTTTG GACGT CCTGT TAATGTTCTA AAAGGTACTA GACGTTCTAT ATTGTTGTA	240
AATGGTGGAA TATCGTCGAC CTTGTTTATT TGAACCGGGG AATACTGCTG TCGGTATTAC	300
TTCTCGTGGT TGTGGAAGTT ATATTTAAAA ACGGAAATTT TCTCAGCAGC GnTTTCGTTA	360
GGAAAATACT TTIAACGGGC ATTCCAGTTT GTTCnTCGGG	400

(2) INFORMATION FOR SEQ ID NO: 2938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2938:

5	TATCTCTTAA AGCCGGTGAT GGTGGTAATG GTATTACCGC ATACAGAAGA GAAAAATATG	60
	TACCATTTGG TGGACCAGCT GGCGGTGACG GTGGTAAAGG TGCTTCAGTC GTATTGAAG	120
10	TGGATGAAGG TTTAAGAACG TTATTAGATT TTAGATATCA ACGTCATTT AAAGCAAGCA	180
	AAGGTGAAAA TGGCCAAAGT AGTAATATGC ATGGTAAAAA TGCGGAAGAT TTAGTATTAA	240
15	AAGTTCCACC TGGTACAATT ATTAAAATG TTGAAACAGA CGAGGTTAG CAGATCTTGT	300
	TGAAGATGGT CAAAGAGCTG TAGTAGCGAG GGCGGTCGAG GTGGCCnAGG TAATTCACGT	360
	TTTGCAACAC CTAGGAAACC CTGGCACCTG GACTTCATGG	400

(2) INFORMATION FOR SEQ ID NO: 2939:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2939:

25	CTAACCTCGA GTTCGTATTA TGCCCACAC ATGTCTGCTG GCTTGTGTA AATATTAACA	60
30	GATTTCAAAG TTTGACAAGC TTTTTGGAAA CCTTCTTCTA CTGACATAAT AGGATCTTCA	120
	TGTTCAATAC TTAATACATA ATCATATCCA TTAATAATAA GTTGACTTAT GATATCTGCC	180
	CATACATATG GACTATGTCC TAAGCCAAT GTACGGAATG TCATGCTCTT GTCGAACGT	240
35	TACCATATGG TTGCATATCA GTTAGACCAT ACATATTTAC ATTTTCTTGG ATTAATATAC	300
	GTATCTTAG CATGGAAGTG ATGAATTGCA TTTGCTTGGn CTAATATGCG AATCGCAGCC	360
	AATGGGTCA ATAnCnTGGC CACC	384

(2) INFORMATION FOR SEQ ID NO: 2940:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2940:

50	TTTCATATTT TTCTATTAAT GATTCATATT GTAGGGTGAT TGCAATGTCA TCTAAGCCAT	60
	TTACAAGTTT ATTCTTCCAA GTTTCATCAA TTTCAAAATG GAAACGCTTG TCTGGTGATG	120

55

CACTTTTTC TAAAACGATA GGCAACATCG CATTTTAGT GCAATTCTATA TAAAATATGT	240
CACTGAAACT TCCTGCAATA ATAATATGAA AACCATAGTC CTAAAGAGCC CAAGCAGCAT	300
5 GTTCACGACT TGAACCACAT CCAAAATTAT CTCCAGTnAT TAAATnGGAG GCCCCTTTAT	360
ATTGTGGTTT GTTAGGGTTG AATCAGGGTT TnTnGGAACC	400

(2) INFORMATION FOR SEQ ID NO: 2941:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2941:

20 ATCATAATCC ATCGTGCCTC CAAGAAGTAC TTGATTATTAAAGTTTGTA TTGTGAATCC	60
TGTGCACATT GTTCTCACTC CTCCTGTACCT TCATTTACTT TAATCACTTT CAAATAAAC	120
25 TGTTTCACCTT AAACATACTA TAAAAAAATCA ATTATACAAG CAATTAATTG ATATTCAATC	180
TCAATAACTG TGGTATGATA TGTAAGGAAA TCATGACTTA TGTGTGAGTG AACGATCATC	240
TATACATCCG TTCACATTCACTC CTCATGACTT TCTATATTAA ATTTTTACAA GGgAGTGACA	300
30 TCTGTGAATA ACACACAATC TTCACCACGC gTAAaTaTtAT TaTTGCGATT ATGTTGTCTG	360
CATAACATAT GGTTGTTGCA CAATCATTAT TAnTATAGGA CCTCCGTTG	409

35 (2) INFORMATION FOR SEQ ID NO: 2942:

- 40 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2942:

45 ATGAAGTGTCA AAAAGGTTTA AAAACATCTG AAAGGGTTTC GCACATGTTT TAAACTTTAA	60
AAATAAAGGT GGATGTCCAA AATGTCGACC AGCAATCAAC TATTATTTAA ACATGGTTTA	120
50 TCCACATGAT CATGAAGATG AAAGAGAACATC AAGATTGCT AACGAACGTT ACCATGCGAA	180
TATTCAAAAT GATGGTACAT TTTCTGTTAT ACCTCAAATG CGTGGGGGTG TTACAGATGC	240
AGACCAACTG ATTGCTCTAG GAGAAGTGGC TAAGAAATAT CATGTGCCAC TAGTTAAAGT	300
GACAGGTTCA CAACGTGTTG GTTTGTATGG AGTTAAAAAA GAAGATTACC AAATATATGG	360

(2) INFORMATION FOR SEQ ID NO: 2943:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2943:

ACCTGGAAAT	GTATGTGCCA	TCTCTTTAAG	CCAATCAGTA	TCTTGAATAAC	CTTTCGTTCC	60
AACTATGCAA	TAATTAATCC	CTGCGGAAA	GTAGTCCATG	ATTGTGACTT	CGTACGAATG	120
CCACCACCTA	CTTCAATATC	TTTGGGTTGTT	AATCTCCTCA	ATGACTTAAT	ATAATCAAAC	180
TCTCGGGCAT	GCTGTGCCTT	AGCACTCATC	AAGTCGACGA	TATGAATAAC	ATTCACACAT	240
20 TCAAATTGAC	TATAGTAAGC	AATACTTTCT	TCAGCCGAGC	GTGGACATTT	TTTCTTCACT	300
ATCATATTAA	CCCTCTGTTA	ACCTCACACT	TGTTGACCCA	ATCAAATCAA	TCGCTGGGCC	360
25 ATAATTCAAT	CATTTATAAA	ATCCCCCTTG	TATTGGCCTG			400

(2) INFORMATION FOR SEQ ID NO: 2944:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2944:

AACAAAAGGG	GTCTATCGTC	AATCGTTCT	TGAATAGTGT	TGAAAAAAATC	GGAAATAAAT	60
TGCCAGATCC	TAGCGTCTTA	TTCTTTTAA	TGTGTGTGGG	CTTAGCCATT	ATGACATGGG	120
40 TTATCTCATT	ATTTAATGTA	TCTGTTAACG	ATCCAGGTAC	GCATCAAACC	ATTTATATTA	180
AAAAATATAAT	TAGCCATGAT	GGATTTACGA	TGATAATGAA	TGATACGATT	AAAAAATTCT	240
45 CAGAGTTCCC	AGCATTAGGC	TTAGTACTAG	CAGTGATGAT	TGGTATTGGT	GTTGCAGAGA	300
AAACAGGATA	CTTCGATAAG	TTAATGATT	CTGTTGTGAA	TCGCGCACCA	CGTTTCTAAA	360
TTTACCGCTA	TAATATTAAT	GGGnATTTA	GGGAGTCAGA			400

50 (2) INFORMATION FOR SEQ ID NO: 2945:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2945:

5	ATTTTACAAG TAACGGTGCA TCACCAGATT CTAATTAAAT GTCATGCTCA GCAGCATT	60
	GATAACCCAA CTTTCAAAAG TAGTCAAAAC AATGGTCTAC ACAACCGTA CTATACTCTT	120
	GTGCTTGGC CGCTCTCTA CTGCTTGAAC CAAGCCACGA CCTAATTTT GTCCACGTAA	180
10	TTCAGGATGA ACTGATAAAG AGGCAATCGC CAAACCATAA TACGTCTTAT CATCACTATT	240
	AATTTCTACT TCAATTAAATA AAACGTGTCC AACGACATCG TTATTTTCAT TTTTCGCTAT	300
	TACTTCTAAT TCAAAATTAT AGCAAGGAGA TTTCTTAAA TGGTTTACTT TCGGCACGTG	360
15	CCTGGCCAAC TCGTTTCAG GATTATCATC CAAACTTTCC	400

(2) INFORMATION FOR SEQ ID NO: 2946:

- (i) SEQUENCE CHARACTERISTICS:
- | | |
|----|----------------------------|
| 20 | (A) LENGTH: 400 base pairs |
| | (B) TYPE: nucleic acid |
| | (C) STRANDEDNESS: double |
| | (D) TOPOLOGY: linear |

25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2946:	
	GGAAAATAATT ACTTGAGCTA GATAAGTTGA CAGCTGTGCA ATTATTTCA GCAGCTAATT	60
30	GTAAAATTG CTCTAACCTT GCTGATGAAT GTTCAGGCC TTGACCCCTCA TATGCATGAG	120
	GTAAGAATAA TGTTAACCTT GAACGTTCTC CCCATTTGA GCGAGAACTG AATAAGAAGT	180
	TGTCAAAAAT CATTGTGAC ATATTTGGCA AAATCACCAT ATTGTGCTTC CCAAATATTG	240
35	AAGCTTTTT TGTTTCCAC ATTATAGCCG TATTCAAAAC CAACTACTGC TGCTTCTGAA	300
	GCGGAGAATT GTGTATATCA AATGTCGCTT TTGACAGG AGCATGATGT AAAGGTGTAT	360
	ATGTTnCACC nGTTTGCTCA TCATGThACA CGGCAGCCGT	400

(2) INFORMATION FOR SEQ ID NO: 2947:

- (i) SEQUENCE CHARACTERISTICS:
- | | |
|----|----------------------------|
| 45 | (A) LENGTH: 400 base pairs |
| | (B) TYPE: nucleic acid |
| | (C) STRANDEDNESS: double |
| | (D) TOPOLOGY: linear |

50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2947:	
	AAGTGGCATA AAAAATCAC ATGACGATAC ATTGTCGTCA TATGACTTTA AATATTATTC	60

5	TTCAATTGTG TCACCGATTT TTAATACATC TTCCACTTTT TCAATTCTAT TTTTGAAAT	180
	TTGTGAAATG TGAAGCAACG CATCTTACCG TGGGAATAGG CCTACAAACG CACCGTATTT	240
	TTCAATACTG TTAACAGTGG CTTGGATAAG TTTGACCTAC TTCCGCTTCAG CGTGTAAATT	300
10	CCTCAATGAT TTCACGAGCA CGATTATCA TAGCTTGATC AACAGCACCC ATAAAGATAG	360
	TACCATCCTG GACCATATCh AATTTAACAC CnGGnTCCTC	400

(2) INFORMATION FOR SEQ ID NO: 2948:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2948:	
	TTTTCAAGT TTGCTGAAG GCTTTACACA AGGCTATTTA ACAATGGATG CCATTGCAGC	60
25	AATTGCTTTT TCAATGATTG TTGTTAATGC AGTAAAACCA ACAGGCATTA CTAAAACAAA	120
	TCAAATATTC AAACAAACCTT TGACTGCTGG TTTAATTGCA GCCGTAGCTT TAATTTCAT	180
	ATATATTTCAT TTAGGTTATA TTGGTAATCA TATGCCAGTA AGTGACATGA CGTTAGATCA	240
30	ATTGAAATCC AAAGATCGAA ACATTGGAC ATATTATTA ACGACAATGG CTTCAACAGG	300
	ATTTGGTCAT CCGGAAAATA TTATTGGCA TCATTGTGGC GCTGGCATGC TAACTACAGC	360
	ATGCGGGCTA TGGTGCAGTT CCTGAATATT CCATAGATCG	400

(2) INFORMATION FOR SEQ ID NO: 2949:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2949:	
	CATGGCTTCA GATTGTTGA ATTGAATGGA CAATTTGGn TTCTGTCCAA AATTCTTACA	60
	AAATCTTCTA CCGATAAAACT ATCAAGTTCA ACTCTAATCG GAAAAACGAC CTTGCAATT	120
50	TGGTATCAAG TCACTCGGCT TAGATACATG GnAAGCTCCA GCACCTATAA ACAGCATATG	180
	TTCACTTATTC ACAGTACCAT ATTTGGTTG AATAACGCTA CCTTCAAGTA TAGTAAAAT	240
	ATCTCTTGA ACACCTTGTC TTGAGACATC TTGACCACTA TTATGATTAT TCGTCGCAAC	300

GTTAGCGCTT TCTTGATCAn TTAGTTCATC CGCATAACTA

400

(2) INFORMATION FOR SEQ ID NO: 2950:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2950:

15	TTGACTTTGT AACTAAACTA CTCACTCGAC CGACTCAACT GTTTAAATGT TTCAGATGGT	60
	TTAACTCTAA ATACTACGTA TAAATCACCA GCAGGTCCCTC CATTACGCC TGGAGAGCCT	120
	TCACCAGCTA ATCTAATTG TTGTTCATTG TCGACACCTT CAGGTACTTT CACTTCTAAT	180
20	TTAACTGTTT TATTTTCAGT ACCITTTCCG TGACATGTTG GACAAGCTTC TTCAAATTCT	240
	TGACCACTTC CATTACATTT AGGACAAACT TGTTCACTAC GAACCTTACCC TAAAATTGTG	300
	TTTTGTTCTA CAGCTACATG ACCAGCGCCA TTACAGTAAC TACAAGTCTT TTTACTTGTT	360
25	CCAGGCTTTG CACCATCACC ATGACATGTT TCGCATGThA	400

(2) INFORMATION FOR SEQ ID NO: 2951:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2951:

40	CAATGATTTT AAAAGATGCA ATAAAACCAA ACTTAGTACA ATCAATTGAA GGGACACCTG	60
	CATTAGTTCA TGGTGGACCA TTTGCGAATA TCGCACACGG TTGTAACCTCA ATTTTAGCAA	120
	CTGAAACAGC ACGTGATTTA GCTGATATCG TTGTAACGGA AGCTGGATTT GGTCAGACT	180
	TAGGCGCTGA AAAATTCATG GACATTAAG CGCGTGAACA GGATTTGATC CGGCAGCTGT	240
45	CGTTGTTGTT GCGACAATTG GTGCGTTAAA AATGCATGGT GGTGTAGCGA AAGATAATTT	300
	AAAAGAAGAA AATGTAGAAG CAGTAAAAAG CAGGAATGGT TAATTTAGAG CGTCATGTTA	360
	ATAATATTAA CAATTCCGTG TAGAnCCGGT TGTTGCCATA	400

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(2) INFORMATION FOR SEQ ID NO: 2952:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs

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- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2952:

TCAAGTAGCA AAAGAACAG GTGCTTCAGT TATCGGTATT GATATTGGTC CACAAGCCGT	60
TGACCTAGGG CGCAGAATCG TTAACGTCTT AGCACCAAAT GAAGATATAA CAATTACGGA	120
TCAAAAGGTA TCTGAACTTA AAGATATCAA AGATGTGACG CATATCATAT TCAGCCGACA	180
ATTCCPTTAA AGTACAGCAT TTTAGAAGAA TTATATGATT TAACAAATGA AAATGTCCGT	240
AGTTGCAATG CGCTTTGGTG ATGGCATCAA AGCAATATTT AATTATCCGA AGAACACAGCG	300
GAAGATAAGT GGGCCATGTG TGAATAAACCA TATGAGACCA CAGCAAATIT TTGATATAGC	360
ACTTnATnAA AnAGCCGGCT ATAAAGTnGG TATTACGGAT	400

20

(2) INFORMATION FOR SEQ ID NO: 2953:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2953:

CGCAATTACAC AATAACATTA AATAATTTT GGTCTCATAT TTCAAAAAAA CATACTGTTA	60
TTATCCCATG GGnTTAAAAA TATCATTAGT ATATAAACGA AACACTTAC GATAAATGAT	120
ATCTGCAAGC CAAGCTGTTA CAAATGGTAC AACAAAGAAC GCTACTACAA TTAGTAAGAC	180
ACTCAACCAA GCAGAACCAA CCTCCATAAA TTTAAATGCA TTAATCGGTC CTACCATTCC	240
TATAAAACCA AATCCAGCTG ACTCTTCGT TCCATGAATA CCTACTAATG CTGATACCAA	300
ACCTGATACA ATGGCTGTG TAnGGGCGGG GnGCATAAGA ATTGGATATT TCACCATATT	360
AGGTATCATC ATTTAACGC CTCCAAAGAA GACCGGATAA	400

40

(2) INFORMATION FOR SEQ ID NO: 2954:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2954:

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AACACTTTAA TGGAGATTTA GCAGGCAC TG TTACACTGAC AGCAGGTTA GGTGGTATGG 120
 GTGGTGCGCA ACCGTTAGCA ATTACTATGA ATCATGGGT AGCAATTGCG GTGGATGTTG 180
 5 ATGAAACACG TGTTGATAAG CGAATTGATA CGAAATACG TGATGTTAAA ACAGCTGATT 240
 TAGATGAAGC ATTAAAATTA GCAGAAGAGG CGAAAGAACG TGGGAGAAGG ATTATCAATC 300
 10 GGGTTAATTG GGAAATGCTG TAGACATCCC ATCCAAGCGG ATTCTAGGAA AAAGGGTTTT 360
 AAAATTGGAC ATTAATTACT GGnCCCAAAC CAAGTGCCCC 400

(2) INFORMATION FOR SEQ ID NO: 2955:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2955:
 TTCAGAATAC GAGCAATGTC AGTTGCAGTG TTTAATAAAT TTTGTTCGCT ATTTTGTAGG 60
 25 CATCTTCTAA AGTGCTAGGT GAAGAGATTA TAGAATAGGC ACTATCAATA CCGAAATCGT 120
 AACATGTTG ATAATTTCTG CCTAGACTGC CACAAATCGC GATGACAGGA ATATGATATT 180
 30 GTTTGCAGC TAACGCAACG CCTACGGGTG TTTTACCAAA GATGGTCTGA TAATCCATGC 240
 GTCCTTCTCC AGTAATAACG AGGTCTGCAT CTTTAATTCT TTGATGAAAA TCTGTAATGT 300
 CAAAGACGAC ATCAATACCT TTTGTTAAAG TTGTCTCACAA AACCGnTAAT AATGCTGCGG 360
 35 CCATACCGnC AGTGCACCCAG AACCTGGTAT TTGGTnACG 400

(2) INFORMATION FOR SEQ ID NO: 2956:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2956:
 AATACGTCCT TTATATAATG TTAATAACCA GTTAAACAAT TTCACACCAAG TTGGAATACC 60
 AATCAGCATT GTTGAAATTG AGAAGAATGA GTTGATTAAC GCACCATTAC CCATTGTGAA 120
 50 GAAATGGTGA ACCCAAACTA AGAAACTAAG GAACGCGATA CCGGCAGTTG CCCATACCAT 180
 ACTTTGATGT CCGAATAAAC GCTTACGAGC GAATGTCGGG GATAATTCT GAGTAAATAC 240

5 CCAAAGCATT GGGCATACCG CCATGTGGCA CTGTGGAAGA ATGCTGTGTC CAATATTCCG 360

nTCATTGGTn CATTAATGGC TAACGCTAAC GGTTAAAGG 400

10 (2) INFORMATION FOR SEQ ID NO: 2957:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2957:

TAGTAATTAA TACGATGTCA GCACCTACTG ATTTTGCTTT GTCTGCTAAT AATCTTAAAT 60

GTTCCGTGGA CCTGAAACAG AGATAATTAC AAATACATCA TTGACTTAA TCGCAGGTGT 120

20 CGTTGATTCT CCAACAACAT GTGCCTGTTT GCCGAGCTGA TTTAAGCGCA TTGCAAAACT 180

ATTCGCCACG AATCCTGGAA CGTCCTTGC CAGCTACAAA TATATGTTCA GCATGTAGTA 240

TTTTGGGATG CAAAAGTTGG AAAACTCCAT CCGnTTCAAC ATGTGACAAA GTCATCTTG 300

25 AATTCACTCA GANTTAATTG ATAGTCACTA AnTTTAGCCA TATTACTTAC CTTCGGTTGC 360

CAGCGCGACC ATTGTTTCGC AGCTTCTTAC TGGG 394

30 (2) INFORMATION FOR SEQ ID NO: 2958:

(1) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2958:

40 AATTATTCTA CCTATAATTA AAAATGCTGG CAAAGGTGTA ATGATGATGA GTAATGAACC 60

TACAACATTT AATATCAATC CTACATAAGT AATTTGACG CGACCAAATT TATCAGCAAC 120

45 ATCACCAAGCA CCTACGATAA ACAAAACCAGC AAATAAGGCA GATAAGCTAA CAGCGATTAT 180

TTATCGTTCC AACGTCACTA CTATATGTTG ATTGTAATGG GACAACAAGA TTAACAAGTG 240

ACTGCGCGAA TAGCCAAAAG GTAATAACCC CTAAAACGAT ACCCAAAnGC AATCGGTTGT 300

50 TCACCTCTTA AATTGTTTG ATGTGTCCnT GGATTAGGAT AAGCCTCCTA TGTTTAGGAA 360

AAACAATTAA TAATATGGTA TATTAAGGAN ACATTCCCTT 400

(2) INFORMATION FOR SEQ ID NO: 2959:

- (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2959:

10	CTTCTTTCTC AACATCAAAG AACATATGGT TTTGTTCAA ATATTCTTTT ACTAGCGCGA	60
	TATGTTGTC TGATCTACCA GTTAACCTCA TATATTTAAG AGATTCATCA TCAACTGGGA	120
	AGAATCCGCA AGTTGCTCCA TACTCTGGTG CCATGTTGC AATTGTAGCA CGGTCTGCTA	180
15	GTGGTAAATG TTGTACACCT GGACCAAAGA ACTCCACAAA TTTACCAACA ACACCTTTT	240
	TACGTGGCTC TTGAGTTACT CTTAACGCTA AATCAGTTGC TGGTGCCT TGTGGTAATG	300
	AATTTACTAG TCGTACACCA TTAACCTCTG GAATTGGGAA AATAGGAGGG TTGTCCAGGC	360
20	ATTCCAGCTT CAGTTCAAT ACCACCAACA nCCCTCCTAG	400

(2) INFORMATION FOR SEQ ID NO: 2960:

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2960:	
	ACGTCAAATG TAATCACAAT CGGAAAGTAT CGTGACAATG CATATATAAC AGGGAGGGTT	60
35	TAAATATGAG TTACTAAGGG GATTTTTAGA TTTAGGTGCA CTGTTTATTT TACCGGTTGT	120
	CATATTCTTG CTTGGCCTAT TCTTTAGGCA GAAAATTGGA GCGGCATTTA GGTCTGGTTT	180
	AACAATAGGT GTGGCTTTG TAGGGATTTT CTTAGTCATC GATTTATTAG TTAAAAATT	240
40	AGGGCCAGCA GCACAAGCGA TGGTTAAAAA TTTAGGCGTC AnTCTGAATG TGGATTGATG	300
	TAGGTTGGCC AGCAACATCA TCTATCGCTT GGGCATCATC TGTnCGChCC ATTTTATTAT	360
	TCCACTCGGG ATTCA TAGTT	380

45 (2) INFORMATION FOR SEQ ID NO: 2961:

- (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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5	GGCCATTGGT CGAACCTTACG AAGAACATCATT GTTAAAAGCA ATTGATCAC TTGAGTATGG	60
	TGTGCATCAC TTAGGATTAC CAAATGGTGA AAGCnTCQAT CTTGATTATA TTAAAGAACG	120
	TATTCACAC CAAGATGATG GACGATTATT TTTCATCGGC GAACAATTAG AAGAGGCACA	180
10	ACAGTAGAAG AAATTCTAA TATGACTCAG ATTGATTACT TCTTCTTACA CAAGTTCCAA	240
	AACATTATTG ATATTGAGCA TCAATTAAAA GAGCATCAAG GTGATTTAGA ATATCTTAAA	300
	TATGChAAAG ATTATGGnTT TAGTGGTAAA ACAATAGCGC ATCGCCTTAA TATGACGG	358

(2) INFORMATION FOR SEQ ID NO: 2962:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 364 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2962:

25	TTTGGGCATC ATTAGGAAAAA TTCTTTGAGC AACTTTAGTG TCTACTGGGT AATACAATT	60
	TATCACCATG TTTTCTAAT AAATCTTTTG CGAATCGATT TTATCTTCTT CTAATAATGA	120
	AATAACCAATT TCTTACCTT GCGCTTTAA GAAAGTATAA GCCATACCTC CGCCGATGAT	180
30	AATTITATCA GCTATGTTAA CTAAGTTTT GATGACATTA ATTTTGTCAAG ATACTTTGn	240
	GnCACCTAAA ATAGCAACAA CTGGTTTATG TGGATCGTTA ACTACGCCGC CAATAAACTT	300
	AATTITCTTAA TCCATTAAGA ATCCAGCTGC AGTTTCTAAA TGTGTAGAAA TACCAACATT	360
35	ATTn	364

(2) INFORMATION FOR SEQ ID NO: 2963:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2963:

50	GTTGATTTCT TGAAAGATAA TAAAAAATTC AAAGAAATGG GATCTAGGAT TCCTAAAGGT	60
	GTCTTACTTG TTGGACCTCC AGGTACTGTT AGAAACATTA CTTGCTAGAG CGGTTGCAGG	120
	TGAAGCTGGC GCACCATTCT TCTCTATTAG TGGTTCAGAC TTTGTAGAGA TGTTTGTGG	180
	TGTTGGTGCG AGCCGTGTTG GTGACTTATT CGATAATGCT AAGAAAAACG CGCCTTGTAT	240

TCATGATGAA CGTGGAACAA ACCCTAAACC AnTATTAGTT GAA ⁿ GGATGG TTTnCGGTGG	360
AAAATGAAGG TG	372

5 (2) INFORMATION FOR SEQ ID NO: 2964:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - 10 (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2964:

TTAGCAGAAC GCCCACAAAA CCTATCTCTT GCTGTAAAAG AATTTGTGAA nCTGCTGGCT	60
TAAAACGTGT TGGCATATT GCAGCTTTAG GAGCTACAGT TATGTTAGGT TTAAGTACAA	120
20 TAAAAAAATT ATGCCGTAAA TAGAGCAAGA CATAACAAAT AATTTAGGAG TCTGGAACAA	180
TAATCAATGT TCTAGGCTCC TAAATGTTAT ATTGGCAGTT CTGAAACATT TATAAATCTT	240
TGATTATGAA CTCACAAACAG TGCTCTATGC TTTTATAGAT TTTAATAAAAT TAGCCATTTC	300
25 AATTGCACTT ACTGCTGCTT CACACCCATT ATTGCCAGCT TTCGnACCTG CnCCTTCCAC	360
AGCTGGGCAA TACTGCCAGC CG	382

30 (2) INFORMATION FOR SEQ ID NO: 2965:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2965:

GGGAATCATA CAATCATTAC CAATAAACAT GTTACTTATC ACATGAAAGT CGGTGATGAA	60
40 ATCAAAGCAC ATCCTAATGG TTTTTATAAT AACGGTGGTG GACTTTATAA AGTTACTAAG	120
ATTGTAGATT ATCCTGGTAA AGAAGATATT GCGGTCTGAC AAGTTGAAGA AAAATCAACG	180
45 CAAACAAAAG GTAGAAAATT CAAAGATTC ACTAGCAAAT TTAATATAGC ATCAGAAGCT	240
AAAGAAAATG AACCTATATC AGTCATTGGT TATCCAAATC CTAATGGAAA TAAACTACAA	300
ATGTATGAAT CAACTGGTAA AGTACTATCA GTGAATGGAA ATATAGTGAC ATCTGATGCG	360
50 GTTGTCCAAC CTGGCAGCTC TGGTTCACCT ATATTAATA	400

(2) INFORMATION FOR SEQ ID NO: 2966:

- 5
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2966:

10	TGGGGATTCA CAGGCTAATA CATTGACTT TATTAGCTGG TGCGGTAAC GGCGCTGAAC	60
	TTTAAATGCG ATTCAAAGTG CTGCAATTAT AAGTGCATT CCATTCTCCT TTGTCGTCA	120
	ACTCATGATG GTAAGTTCT ACAAGGATGC GAACCAGGAA CGTAAATTCC TAGGTTAAC	180
15	ATTGACTCCG AATAAACATC GCTTACAAGA ATATATCAAG AGTCAACAAG AAGTTATGAA	240
	TCTGACATT TCAGTACACGT GAAATATAGA GAAAAAAGAT AACTAATAAA	300
	GTITAGTTAA GTATTITAAT ACAAGTAGT ATGTCATTCT AGTAGCTAGA ACGGThATAC	360
20	TACTTGTnTG TTTTGTGGA AATTGAGTAT TTCAAAGGTT	400

(2) INFORMATION FOR SEQ ID NO: 2967:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 387 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2967:

	ACGAGGAATT AGTGAAGTAC AATATTATCG GTGGTTTGA TTTAGGTGTT GTITCAGACG	60
35	ACTTTAAAAA TCACATGTTA ATAGCTGAA CTGAATTAAAG AACAAAAGAT GAAATCGATA	120
	CATTTGTAGA AAAGGCTGGT GAGTTAAATG ACTAGTAAAT CAAGTCCATT AATTTTGAA	180
	AGATCTCGTG AAGGCAGATA TGCAATTCA TTACCAAAAA GTGATATTAA AACAAATTCT	240
40	GTTGAGTCAT TGTTAGATGA TAAATTTATT CGTAAAAACA AAGCGGAGTT TCCTGnAGTT	300
	GCTGGAACTA GACTTnGTAC GTCATTAAATC CTGGACCTTT CCAAATAAAA AATTCCGGnG	360
	GTAGACACCG GGTTAACCC ATGGGGT	387

45 (2) INFORMATION FOR SEQ ID NO: 2968:

- 50
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 806 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

	AACAAGTGCA AGTGAGTCAA CATCAGAAA TGCGTCAACA TCACTCAGTG ACTCAACAAAG	60
5	TACAAGTAAC TCAGGGATCAG CAAGTACGTC AACATCGcTC AgTAACTCAG CAAGCGCAAG	120
	TGAATCCGAT TTGTCGTCAA CATCTTTAAG TGATTCAACA TCTGCGTCAA TGCAAAGCAG	180
	TGAATCCGAT TCACAAAGCA CATCAGCATC ATTAAGTGAT TCGCTAAGTA CATCAACTTC	240
10	AAACCGCATG TCGACCATTG CAAGTTTATC TACATCGGTA AGTACATCAG AGTCTGGCTC	300
	AACATCAGAA AGTACAAGTG AATCCGATTC AACATCAACA TCATTAAGCG ATTACAAAG	360
	CACATCAAGA AGTACAAGTG CATCAGGATC AGCAAGTACA TCAACATCAA CAAGTGACTC	420
15	TCGTAGTACA TCAGCTTCAA CTAGTACTTC GATGCGTACA AGTACTAGTG ATTACAAAG	480
	TATGTCGCTT TCGACAAGTA CATCAACAAG TATGAGTGAT TCAACGTCAT TATCTGATAG	540
	TGTTAGTGAT TCAACATCAG ACTCAACAAAG TGCGAGTACA TCTGGTTCGA TGAGTGTGTC	600
20	TATATCGTTA AGTGATTGCA CAAGTACATC AACATCGGCT AGTGAAGTAA TGAGCGCAAg	660
	CATATCTGAT TCACAAAGTA TGTCAGAAC TGAAATGAT TCAGAAAGTG TAAGTGAATC	720
25	TAATTCTGAA AGTGAATCTA AATCGATGAG TGGCTCAACA AGTGTAGTG ATTCTGGCTC	780
	ATTGAGCGTC TCAACGTCAT TAAGAA	806

(2) INFORMATION FOR SEQ ID NO: 2969:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 351 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2969:

40	ACCATCTACT CCGTTAATAG TTACACTGTT ATCATTGGTG TTTGGACTTT CAGCCCTTGC	60
	ATCTAAAAAT ATAAGCTGAT TAAAATCTGT TATTACTTCT TCCTTGTAAC CATCTATGAT	120
	TTTTACAAAA GATTGCATTA ATTAGTCAAA CCTCCCATAT AATTATTTGC ATTTGCTCTA	180
45	TGCCCACTTT GTTTGACAA TATTTTTCTT AAACCTCTAA TTGCATCATT AGAACCTAAG	240
	GATTATCCTG AGAAGAAACA GTTTGAATCA ACGCATCTGT TAATTnATTn CCTTTATCAC	300
	TTAACATAAC AATTGGTTTC AACAAATTnC AACTGTAGAA GTATCATTAT T	351

(2) INFORMATION FOR SEQ ID NO: 2970:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2970:

5	AGTGCTTGAT GAATTTGAC CACAAATTCA AATGTATCAG GCGTTTCTTT TATCCATTTC	60
	AATATATTTC TTTCGGTTG TATCGCATAG TATGTCGCAT CTAATTCGAC AACCGGAAAA	120
	TGTCCAGCAT ATGTTTTAAG TTTATCGTT TGGCGTTCTA AATCTTCATA TAATGAATAG	180
10	TGATCACCCC AACCTGTTAA TCCGATGTTT ATCATATATA TCACCAATGT CATCATAACCA	240
	TATAACTTTT ATCATAATCA TTTCAGCGAA CTTIAGTTTG ATGTTTTGTC TTGATTAAAA	300
	TCTTTTCGGC GAnCTCAGC TTGATGTTT TCGTTGATTA AATGGTAAAT AGnnACGCA	359

15 (2) INFORMATION FOR SEQ ID NO: 2971:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2971:

25	CAGACGGTCA AGAACCTTAT ACTTATCAA ATTATATACTG TGAAGCGAGT CTATGGCTA	60
	AAAGACTCAA GGCTTATCAA CAATCTCGTG TTGGGCTATA CATAGATAAT TCGATTCAAT	120
30	CGATCATTAA AATACATGCA TGTTGGTTGG CAAATATTGA AATTGCGATG ATTAATACAA	180
	GGTTGACACC TAATGAGATG ACGAACATAGA TGAAGTCAAT CGATGTACAA TTGATTTTT	240
	GTACCTTGCC ACTGGAATTA CAGGGTTCA AATTGTATCG CTGGGTGATA TTGAATTGCG	300
35	TGGAGGGATA TTACAnCGAn CAGTTGTTGG GCAACACAAT GGGTATCCAT TTGAACCAC	360
	GGATGnAACT TTGTGCCGAA GGTCGCCTCC ACATnTAATG	400

40 (2) INFORMATION FOR SEQ ID NO: 2972:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2972:

50	TCAACCGCTT TACAGCCAAC CGGCGACGCT GACATGGATC GCCTGGCCCA TGCCCACGCC	60
	TTGGCGCCAT CATTATTAAT TGCTGCAGTT ACGGTATCTT TAATTGCCTT AAATAAACCT	120

AAATCACCGA AATGTTATTG GCTTAACGTT TTGTTGTGT TATTTAAAAA TAAATTTGAT 240
 5 GCAATTAGTT TGTTTATCCG CACAACATCT TATAATGTAC TAAACTGTAT TTTAAAGAGA 300
 AAAGAAATAC AGTTAGGCAT TCAAAACGT ATTTAACACA ATTAAGTTGC CTGAATTGGT 360
 ATTTAAGTCT TATTGAACCT TTTTnAGATA An 392

(2) INFORMATION FOR SEQ ID NO: 2973:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2973:

20 ATTGCAATGA TAGCAATCGG AATCGCACCT GCTAAAATAA ACGTTGTGCC ATCCGTCGCA 60
 TTTGTACCAAC GAATCACAAT GTCACCAAGC GTAGGTGCTC CTATAAATGA TCCAACGGCA 120
 25 ACAACACCTA TCGCAACAAAC CAAGGCAATA CGAATGCCAC CGATAATAAC CGAAACAGAT 180
 AACGGTAATT CAATCATTG TAGCACTTGA TTGCGTGTCA TTCCCATAACC TTTGCCAGCA 240
 TCCTTAATAT TCGCATCAAC ACTAGCTATA CCAGTATAAG TGTTTTTATA ATTGGAAGTA 300
 30 ACGCATATAA AAACACTGTT AAACTACTGT TCTGAnCTAG CCTGACTACA TTAAATAGTn 360
 ACATTGCATG ACTGGACTGn TGGATATATT GCATGGATnC 400

(2) INFORMATION FOR SEQ ID NO: 2974:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2974:

40 GTATTCTTTA GGTAATGCAA CTTTAAATCC TTTAATATCT TTACCAATTG CAGATGTAAA 60
 45 GTCTACATCA TCAACTGGTG CACTTGTAGA GTCATTAACA TCTGCACCAAG AAATAGCTTC 120
 TAATACGATT GCATTATCTT TTACATTTGG AGTCAATGGA CCAATTGGT CTAATGAAGA 180
 50 TGCAAAAGCA ACTAATCCAA ATCGAGATAC ACGACCGTAT GTTGGTTCA TACCGACAAAC 240
 GCCACAATAT GGCAGCCGGT TGTCTAATTG AACCACCTGT GTCTGGAACC TAAGCTAAAT 300
 GGTACTAAGC CAGCTGCAAC TGCTGCTGCA GATTCCACCT GAnGGAACCA CCTGGGCACG 360

(2) INFORMATION FOR SEQ ID NO: 2975:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2975:

GAGATCGCCG	GTTCGATTCC	CGTCGAGACC	GTACAAATGC	CTATCCAAGA	GATA	GGTTTG	60
TnTTGCGTTT	AATATTATAT	TAATAAAAGA	TATATGGACG	AATGATAATC	ATATTGATT		120
ATCTGTTCGT	CCATTTCTT	TAAAATGTAT	GAACCTCAAG	TAACCTAGTG	GTTGGATATG		180
AAAGATAAAC	GTrGACAATA	AAATCTTTAT	TAGACGTACA	AACATATGCT	ACTGTCAACA		240
TATTCTTCG	TTGTGATATG	CCACCA	GTCC	TCCATAACAT	CAATTGTTAA	AGTAACGAAT	300
AACGAATAAT	GATATTnAT	TTCTGAGCCA	TGACGTGCCA	CTAGAAGTTG	CCCATTATCC		360
T							361

25 (2) INFORMATION FOR SEQ ID NO: 2976:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 356 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2976:

TGCTGCTTCT	GAAGCGGAGT	AATTGTGTAT	ATCAAATGTC	GCTTTTGAT	CAGGAACATG		60
ATGTAAAGGT	GTATATGTTT	CACCTGTTG	CTCATCATGT	AACACGGCAT	GCCTATGACT		120
GAATGTACCA	CGTTCACTAT	CTTGACCA	GTAA	GGTGTACCAT	CTTGTAAAAT		180
TGTCGCAAAT	GCAAGTnGTT	CTGCTTGTGC	CCAATCAACT	AAACCATCTT	CTTTATTAAA		240
CGGCTCATGA	CGCTTCTCAA	GAACTTGTT	TAAC	TTTTn	CAAAATGTTA	AAGCCATCCG	300
GATATGTTAA	CAATGCATCA	TTATTTCTTT	CAAGTGA	TCC	AAAAGTAAAG	GnTTGT	356

45 (2) INFORMATION FOR SEQ ID NO: 2977:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 371 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2977:

5	CTTTAGAGCG ACACCTAGTC ACTGCAGCAA GCTATTCCTT TATTTGCTAT GCTATAAnATC	60
	GTAAATTACT AGACCTATTG CTGGTAGATT GATGGATGAT AAAAATGAAA ATATTATTGT	120
	CTACCCAGCA TTTATCATGC TTTTCCTTTC ATTTGTATGC TTAATTCAA GCTATCAAAG	180
10	CTGGTTAATA TTACTTGCTG GTGCTTGCT AGGTTTAGGG TATGGAAATT TATCATCTGC	240
	AATGCAATCT ATTGCGATAA AAGTCTCACCCGATTAAA TATGGTATCG CGACATCTAC	300
	TTTTTACGTT GGTCTAGATG CCAGGTGTCG GCTTCGGTCC AGCATTCCCTT GGGTTAnTTA	360
15	CGCAGnGTTT T	371

(2) INFORMATION FOR SEQ ID NO: 2978:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 365 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2978:

25	TTGTAATTTC ATGATTACAC CTCATTGTT CTTGTTGTTA AAACTCAATA TTTAATTGTC	60
30	TGCGCTCAAT AATTGTTGT TTAAGTTGCT CAATATGATT TGATTGGAAT TCTTCCAATA	120
	ATGCTTTGCT TATTCAAAT GCTACGACAT GTTCCAGAC GATACTTGCT GCAGGAACAG	180
	CACAACATAC AGAACGTTCA ATTGTTGCTT TAAAGTCTTC TTTAGTATTA ATGTCTACTG	240
35	AATTAAATGG nTTATATAAC GTTGGATTG GttTCATTAC ACCATTACGA TAATTGGCAT	300
	CCATTGACAT ACCGCCTCTA ACCACCTAAG TGATTAGAnC ACGATAATAC CAATTCACTA	360
	TATAT	365

40 (2) INFORMATION FOR SEQ ID NO: 2979:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2979:

50	TGATTATATA AATCTAACCA GCCAAGTTTC GTCTGCGGTG AGACATTGAC ATTAATTGCT	60
	GCAGATAATG ATTTAACAAAC ATGTGTGGCA TGTGATTCAAT AACGATGAC AATATCATGT	120

55

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TGGCGATGGG TAACATTGTT AACATTGCTT CATTAAAAAC GATATCGAAT TGATTGTCAT	240
CAAAGGGCAA TTTAACAGCA TTCGCTGTT GAACTTGAAT ATATGATTCA nGACCTGCTG	300
CGGAAATGTT TTCCGTGCTT TTTCTAACGCC TTCTnTATTAT ATCAACGCCT GAnGTGACAC	360
CAnAGTGTGA GCCAGATAAA TAGAGGTGTG CACAGATACA	400

(2) INFORMATION FOR SEQ ID NO: 2980:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2980:

TTTCTGCTTT TGATAATCTT TCATCAATGC AAAAGCTACA TTGGACAGTC CTATAATGGA	60
AATAATGTTT ACAATTGCCA TTAAGCCCAT AAATAAGTCT GCCGTATTCC ATACTGTTTC	120
TGTTTTTACA ACTGCACCGA CAAAGACAAAG TACTACAACA AGACATCTAA AGATAAAATAA	180
25 TATTACACGG TTTGTTGATA AAAATTCAAT ATTAGATTGA CCGTAATAGT AATTACCTAC	240
AACAGATGAA AATGCAAACA GTGnAACGCT TATTGGTTAA GAAAATACCT CCAGCAGAAC	300
CTAAATGCTC CTTAAGTGCC GATTGGGTAA CTGCAACACC nTGGAGGGCG TTTATCACCA	360
30 AATTThCGTC CGGAATATAG TAAA	384

(2) INFORMATION FOR SEQ ID NO: 2981:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2981:

AATTCTAACG ATATCACCAT TTTTACAACC ACGTTCTCTA AGCGCATCAT CAATACCCAT	60
45 CGAACGCATT TGACGAGCAA ATCGACGTAC TGCTGGATCA CTGTTAAAGT CAGTCATTTT	120
AAACATTCTT TCAATAGCAT TACCACTTAC CACATAAGCA CCATCATCAT CTCTTGGAAA	180
TTGTAAATTT ATCTTGTGAC GGTGTATGTT TATATAATAC TCGGTTAATG CCAACTGACT	240
50 CCTCTTCTTC AACTGTGGAG TCAACATCTT TATATTCTTC TGAATTTATC TGCTTATTGC	300
ATATGAATAA TTGnnCAATG ATTATCACGC GTTATTGTTG GAAACTGGGA TTAACTGGCA	360

(2) INFORMATION FOR SEQ ID NO: 2982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2982:

CCTCAACCGC	TTTACAGCCA	ACCGGCGAGC	GCTGnACATG	GATCGCCTGG	CCCATGCCA	60
CGCCTTGGGC	nCATCATTAT	TAATTGCTGC	AGTTACGGTA	TCTTTAATTG	CGTTAAATAA	120
ACCTTCCATT	GAAAACACTC	CTTAAAATT	AAATTGAAG	ATAACAAAAA	CGTGCCTACT	180
TTTGAAATC	ACCGAAATGT	TATTGCTTA	ACGTTTGTIT	GTGTTATT	TAATAAAAT	240
TTGATGCAAT	TAGTTTGT	ATCCGCACAA	CATCTTATAA	TGTACTTAAC	TGTATTTAA	300
AGAGAAAAGA	AATACAGTTA	GGCATTCCAA	AACTGTGATT	TTAACACAAT	TAAGTTGGCC	360
TGAATTCCGT	ATTTGAAGTC	CTAATGGAA				389

25 (2) INFORMATION FOR SEQ ID NO: 2983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2983:

ATATTCCTAT	GACAATGTT	AGGCAACGAT	TCCAAGGATT	AAGAAAAGAT	CAACCGGTAT	60
ACTTATGTGA	TGCCAATGGG	ATTGCTAGCT	ATAGAGCCGC	TCGTATTTG	AAAAAGAATG	120
GATATACAGA	TATCTATATG	TTAAAAGGCG	GCTATAAAA	ATGGACTGGA	AAAATAAAAGT	180
CTAAAAAATA	GTTTTGTA	ATTTAATATA	CGATTAAATA	AAATCTGAGT	GTAAATTGAT	240
CATCAATAAC	AATACTCAGA	TTTAATT	TTAACAAAGT	CTGTTACTAT	ATTTCTCTAG	300
CTTCACTGAT	CATTAAACCT	TAGTTTCAGC	ATAATTAAAGG	AAGGTCCGnC	CCATTTCAT	360
CGnGnTCCAT	TACCGCCAC					379

50 (2) INFORMATION FOR SEQ ID NO: 2984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2984:

5	ATGCTGAAAA TATGGTGCCG TTTATATGAA TCAATTGAA TCCGAACATA ATCCGGATAC	60
	ATATTTTCAT ACATTGGAC CCGAATTGAC TTCAGCATT AAGCAAATTG ATTATTTGT	120
	GGCTGGTATT GGCTCTGGCG GTACATTAC AGGTACGCAC GTTATTTAAA GCAACATCAC	180
10	GTGCAATGTT ATGCCGTTGA GCCAGAAGGG TCCGTGTTAA ATGGAGGGCC AGCTCATGCA	240
	CATGACACTG AAGTATCGGT TCTGAGAAAT GGCCGATATT TTTAGAGAGA CGCTTGTAGA	300
	TGGGnTATT ACGATTAAGA TChAGATGCC TTTCCGAATG TCAAAGTTTG CTATAATGAn	360
15	GGTGTAGTAA GCAG	374

(2) INFORMATION FOR SEQ ID NO: 2985:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 464 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2985:	
	GGAGCCACCA TTGGAGCAnG TTACGGTGGA AAAGATAACGG nAAGGTTnGT ATGACTGTAn	60
30	GTCTTGGATA GAGTAACAAA CCTAATTGT TAACCTCTAGG CCCCATATGT CGCAGTACCA	120
	TCTGCATGTG TTGTTAcATT GTATGCATT GTTTACTTG GCTTCTTGTa TGTCGGCGA	180
	GCTCCGTATG ACACCTGACC GTTGCATGT GTTGTACGT TGTATGCATT TGTTTGCTT	240
35	GGCTTGTGTTT GTGTTGGCG AGGCCATAT GATACTTGGC CGTTTCCATG TGTTGTTACG	300
	TTATATGCGT TTGTTTGCT TGGCTTGTTT TGTGTCGGAC GAGCTCCGTA TGATACTTGG	360
	CCGTTGCAT GTGTTGTTAC ATTGTATGCA TTCGTTCGC TTGGCCTCCT GTATGTCGGA	420
40	CGAGCTCCGT ATGATACTTG ACCATTGCAT GGGTGGTACG TnnG	464

(2) INFORMATION FOR SEQ ID NO: 2986:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2986:	
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AACTATTATA TTAACATACA ATGTAGGGAT GTGATGCGCG TGAAGTTTAG GGATAAAAGAT	120
AATCGTCAAG TTAATTTGAC ATTTAAAAAG GATAATGAGA TAGCAGATGG CAATCATGTG	180
5 CTAGCTATTC CAACGTTAA AAATCAATTG CTTTTACCA AACATAATT ACAGGGGATT	240
GAATTTCTG GTGGTAAAAG GGAACGCGGG GnAAAGTAGT GCTGGAAGCA GTTACACGTG	300
AATTATATGA AGAACACAGGC GCCAAATTGA AAAATGnTTA TTACATAGCA CAATGTnCC	359

10 (2) INFORMATION FOR SEQ ID NO: 2987:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2987:

TAGAATTCTT CTAATGAATG AGCTTCTTAA GAATGATAAC CATAACGAAT TCCGTCAAAA	60
CGAGAAAGGT TTGACGAAGC TTCTGATGAT GCAATCACGT AATATGATGG AATACCAAAT	120
25 TTAGTATTG GCAATGATAAC TTCCTCAACG ACAGCACCTA AAGATTTAA AGTTTCTACA	180
CGCTTTGAA CTGCTCTTT TACGTCATCA GCTACACCTT CACCTAAGTA TTCTTCTAGGT	240
AATGCAACTT TTAATCCTTT AATATCTTT ACCAATTCA GATGTAAAGT CTACATCATC	300
30 AACGGTGCA CTTGTAGAGT CATTAACATC TGCAACAGAA ATAGCTTCTT AATACGGTIG	360
CATTATCTTT TACAnTTCGG GTCATGGnCC CATTTGGTC	400

35 (2) INFORMATION FOR SEQ ID NO: 2988:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 377 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2988:

ATTCAATTCAAT AATTATCAAT CCTTTGTGTT AAATTACTAT ATAAATAGTG TACGnATTTT	60
CGAAATTTGT GATCATAAGT TTATTCAATG CTAAACAATA AGGTTGAGAC ATAATCGTAT	120
50 CTCAACCTTG AAATTATTAT ACGTTGACGT CACTAGTCAT TCAGTTTCT TAATGCTGCT	180
ACAATCTCTT TTTAGTATC TTGTACTTCA GAAGCTTGCT TAATCACTTT TGCAGGTGTA	240
CCAGCAACAA CTGCACCAAGC TGGTACATCT TGTGTACACAA TCGnGCCACT GGCAACAAATA	300

nGATTATAAC CGTGGAG

377

(2) INFORMATION FOR SEQ ID NO: 2989:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 356 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2989:

15	CCAGGnACCT GGACACGCCG GGTCTTATCA TCAATAATAG TAGCATGACA AATCTACTAT	60
	TTTTTCGCTA ATAAGTGGAT GTAATGCTAA TAATGTTGCT GTAGGGAAAC AGCCAGGATT	120
	AGAAATGAGC TTCTGTTCCAT TGTTATCAA CGATTGCCAT TCTGAAATGC TGTAAATAGT	180
20	CATGATTCAA ATCATCTTGAT GCCTGCAGCA GTTTCTTGT AATATGCTTC ATATATTCA	240
	CGnTTCTTAA TTCTAAATGC GCCAGATAAA TCGATAACAT GAATACCTTT TTCTACTAAG	300
	GGAGGGATAC ATGTTTACT TACGGGTGCT GGTGTCGCAA AGAAAATTAC ATCAAAn	356

25 (2) INFORMATION FOR SEQ ID NO: 2990:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2990:

TCATTTTCCA AGTGAGACTC TGCTCTTGCT TTGGCTAATT TAGCTCTTTC AACATCAATT	60
TCTCTTGCAG TTTCTGCAGT CTGAACAATG ATTGAAACTT TATCTTTCT AACTTCAACA	120
40 AAGCCATCGC TTACAGCAAT ATATTCAGTT CCATCGTGGA AATTTCACTT TTACAAAGCC	180
TGTTTTTAAA GCAGCTACAG TTGGGAATAT GTCCACTCAT GACACCTATC TCACCAGCTG	240
TTGTTTGCAT AACAACGAGT TCAACATTAT CACGATTGTA AACAGAACCA TTAGGAGTGA	300
45 CAATATCTAG GTTAAATGT CCATTATCCA TTCCnCCnGA ATTGGnTGA	349

(2) INFORMATION FOR SEQ ID NO: 2991:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 363 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2991:

5	ATGGCCACGT TCATGCCAAT AGCTGTCGTA GTCGCATTT CACGTTCTAG TATTGCATTT	60
	TTTAAATGCG ATGTGTGCTC TACATAACGG CAAATTTAA GTTTATGAAT CAACATATCA	120
10	ATTGCTTCGT TTGAGACAT GTCGTGGATC AGTAATTATC ATAGTTGTT GATCAAAAAC	180
	ATGAGAAGGT TTATGAGAT GTGAATGTT CGCGGTGTTA TCTACATIGT CAACCTCTGT	240
15	ATCATGTTGT GTAATATCTG TATCATGAAG TTGCGGTTGC GCTGGTGCAT CTACTGCTAT	300
	AACTGGTGTA TTGCGTTTA ATAATAGTAC AGTAGTnCAT TGThGACAAG ACTnACCGAC	360
20	TTA	363

(2) INFORMATION FOR SEQ ID NO: 2992:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2992:

25	AAGTTTATTT TAAAATTCGT AATAAAAATA ATAAACTCAT CGAACGATTT AATGGTCTAG	60
30	GTTTCCATAT CAACTATGAG TACATTAAT TCAAATTCGA ATCACGTAAC GTAAAAGATC	120
	AAACAATCCC TGAATAAAAC ACCAAGCAAA TACCCTACAG TACATCATTG GCATGTATTG	180
35	TGGGTTTTTC TACTTTTGT AAATATTGAn AATTATnAGT AGTTGTTTT TACTATTAGG	240
	GCAGAATGCT TTACAATAAC ATGCAAGTGT CAATTAAGGG GAGCACTTGC ATAAATAGTA	300
40	TAGGnGAGTG AGTAGTCCTG GCCATTCCT GGAATTCCCTT AATCGGCAC	349

(2) INFORMATION FOR SEQ ID NO: 2993:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 399 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2993:

45	TTTGTGCAAT AAGCGTTTT TGTTGTTTG CTTTTGTTGC TAATTCACTCT TTGCAACAT	60
	CTTTAATTGT TGTATCTGCA GTAATACCTT GAATATCAGC AACTGCTTGA TCTTTAATT	120
50	GCGTAACATC ATTAGTTGTT TGTGCATTAA AGATATCTG ATACGCTTTT TCTTTAGCTT	180

TTGCTTGATT TTGAGTTGTC ACAGCTTGAT CAACATCATT TTTAGCATTG ATTTAACCGC	300
TGTGCTGGTT GCGGCTTGAA TTGAATCTTC CAGGCTTCGC TGACTACACA TACACAGTGA	360
5 GnGnAATATT TCGGCTGAAC GCGTGCATGT GAAngCTCT	399

(2) INFORMATION FOR SEQ ID NO: 2994:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2994:

AATGACAGGA ATCGTCGTTG CCTTTACTAA TTGACCAGTT AATTCAAAGT TAGGTCCGGA	60
20 CATTGGCCA TCTTTAGCAA TATCAGTATA TATAATGCCG CCAAGAGGTA TATCCGATAAA	120
CCGTCTCACCA AACTAAATAA ATTTAACTCT GTGTCCTCTT CCCATCCGTT CACTTTAATA	180
25 TCTTCTCCAT AGGCATCAAC AGATAAATAA ATGCGACCTG GAAATGTATG TGCCATCTCT	240
TTAAGCCAAT CAGTATCTTG AATACCTTTC GTTCCAACTA TGCAATAATT AATCCCTGCG	300
GCAAAGTAGT CCATGATTTG TGACTT	326

30 (2) INFORMATION FOR SEQ ID NO: 2995:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2995:

CTAATGCCGA TGAGCAAAAC ACAAGCATTAA GAAATTATTA AAAAAGTTAG GTACGTATAC	60
AACATTGATT TTGATAAACG GAAAGTTAGAA ATGTGGATTG ATGTATTAAG TCAAAATGGA	120
45 GATTATCAAC CAACTGTAAA AGCGGTAGAT GTTTATATCA ACAGTAACAA CCCGTACCCG	180
CCTAACTTAC CAGCAATCAT GCGTAAGGAA CCTAAAAAAG TATCTATCGA GCCAGTAGAT	240
AACGAAACCG CTACACACCA TGGGAAAATG CAGAATGACC CGAATTGTCA GACAAGGAAA	300
50 ATAGCGCTAG ATAGTTCATG AATAGTTGGC AGATTGGGC GAACGATGAT ACGnCATTG	360
ATTGAAGTCA TATCGTCGTA CTTAACACCG GACGTTnGAA	400

55 (2) INFORMATION FOR SEQ ID NO: 2996:

- 5
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2996:

10	GAATGTAAGT GTCCCTTAAG CATA GTGCTC CCACCTTAAA TTTGTTACA TACTTCATG	60
	GAATGTACGA GAAATTACAT CTAATTGTTG TTCACGTGTT AATTTAATGA AGTTAACAGC	120
	GTAACCAGAT ACACGGATGT TAACTGTGGG ATATTCTTCT GGATGTTCCA TTGCATCTAT	180
15	TAATGTTTCA CGGTTAAATA CGTTAATATT TAAGTGGTGA CCACATTGCA TTGCGTAACC	240
	ATCTAACATA CTAGTTAAGT ACGGTTTGAT CTCTGGnTCT TTACCTAATG ATTTGGnACG	300
20	ATACTGATGT ATTGAAATAC CATCCTTACA GCATCGTAAG GGGTCCTAGC CACAGAACTT	360
	ATGAAGAAAT GCACCTTTn GGCACnGGCA TGCATGGGGT	400

(2) INFORMATION FOR SEQ ID NO: 2997:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2997:

35	ATGATATTAA CCTGTTACA AGATGGTTGA TACTTGCGCA TGAnATTGAA ATCTTCAACA	60
	CCATATTATT ATGGTACATA CGAAACTGAA AATGAATCCA TAGTTACTGA CAAAGAAAAA	120
	ATCTTAGTAT TAGGCTCTGG ACCAATTGCA ATCGGCCAAG GTGTAGAATT TGACTATGCG	180
40	ACAGTTCACG CCGTTGGGC AATTCAAAA GCAGGGTACG AGGCGATAAT TGTGAATAAC	240
	AATCCAGAnA CAGTTCAAC AGATTCTCAA TTTCTGACAA ATTATACTTT GAACCTTTAA	300
	CTGAnGAGGA TGTGATGAAT ATCATTAATT TTGGA	335

(2) INFORMATION FOR SEQ ID NO: 2998:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 397 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2998:

5 GCAGTAACTA ACTTTGTAC AAAAGGATCA TTTTATCAA CATAATGTGG TGGTTGGACT 120
 TTACCTAATT TCACITCAAA GtATTGTTGA ATCTCATTG CAAAACGATC CATAGCTTT 180
 TCAAATTCAA ATCCTTCTGG GTAGCGTAat TGATAACGAA AAGACCTGCG TTTTCATTAT 240
 CATATGTAAT AACACCAATG TTAGTTGTCA CGTCACCCAT GgACATCTGT ATGGgAATTT 300
 10 CATTCCCAnC TTTTCACCA AAATChGGAA TTGAAATAAG TGAGCGATTa CGAAATGGCG 360
 ACAAACGCCt GTGGCATTGA TnGAGCAAGA TTnAAGG 397

(2) INFORMATION FOR SEQ ID NO: 2999:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xii) SEQUENCE DESCRIPTION: SEQ ID NO: 2999:
 AAAGCTGTGT TGGTAAAGAG TTTTGTGAT TTGGTACGCA ATACACGACA CGACTTGGCA 60
 25 TTCGTTTAgA AAAAACATTT GAATACATCG ATACACCTCA TAAATTCAAAT ATGGGTGTAT 120
 CAGGCTGCC CAGGAAAGTTGT GTTGAATCAG GTGTTAAAGA TTTTGGTATT ATCTCAGTTG 180
 30 AAAATGGGAT TCCAAATCTA TATCGGTGGT AATGGTGGTA CAGAAGTTGA AAAAGCTGAA 240
 TTTTTAACAA CTGTAGAAC AGAAGATGAA GTAATCAAAT TATGTGGTGC TTTGATGCAA 300
 TATTGAnCGC GAAACAGGTA TATATGChGG AAAGAACCCAG CGCCCAGGTT AAGAAGACCT 360
 35 GGATTTGAAA ATGTnAAAAG AAGTCCTTAC CTGGGGCCCCG 400

(2) INFORMATION FOR SEQ ID NO: 3000:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 506 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xiii) SEQUENCE DESCRIPTION: SEQ ID NO: 3000:
 AACGGTAGTA TTACAGAAAG CTCTACTTAT GGTGATAATG ATACACCAGC GCCACCAACT 60
 GACGAATTAG GTGGTAGTTG GACACTATGG AAAAATTTAG CGCGACAAAG TCCTGAATTT 120
 50 GGTAATCCTG ATAAGTTTG CCAAAATATT CCTAAAAAAA GTTGGTTGT TTCAGCAACT 180
 TCTACAACAA ACAATAAAGA GATTATCGAT ACAATAGAAA GTATTTGTAA ACGTGACCCA 240

AGTTTACAA TCAATCGTCA GCrACAGTTT aAAGACCAaC CTGrAAATGA AaTATCTACA	360
TGGATTATG CCTTATATYC AGATGTAAA C GGC GATTATA TTAAAAAGCC AATTACAGAA	420
TGTAGTGGTA ATGAAATATG CCAAGnATGG CTGTATCnCT TnGGTGTATC AACTGACAAG	480
ATTGAAGACT TAGCAAAACA TGCGTC	506

(2) INFORMATION FOR SEQ ID NO: 3001:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 353 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3001:

ATTGATGGCA TCGAAAAACT TTAATAAGAC AACAAAGTTGA TGAGATATAT GTATATAGGT	60
TTGGCATGGA TTTCGATTGC AGTTAATTAG AATAGCTCAA TGCTATAAAT GTAAGTAGTT	120
GATATGAAGA AACTAATGAA CTAATGCAA GTATTGTCTA AAACAATCAT TTTTATTGAAA	180
TTTAGTAGAG CTGAAATTAA TATAACGTGCG TTAATTGAAT AACGCTTATG TTATAAGAGC	240
ACTCATACCA nACCATAATC ATCTATAGnT ATAACAATTc ACgtATAAGG GGCTGTGTTT	300
GGCATAGCCC TTAGGTATAC ACCTAATTCC CATTAAAATA GTAGGGGnTT AAA	353

(2) INFORMATION FOR SEQ ID NO: 3002:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3002:

CAACAAAATG TCTATATGGT AAGTGGTAAA ACGAAAATG ATGAAGACTA TTCATCAACT	60
ATTTTATATA ACAACGAAAA AGAATTACAA AAAATTACTG ATGCTGCTAA AAAGCAAAAC	120
GGTGTAAAAT TAACGATTAA AGAAGAAGAA AAACAAAGTG TCTTTGTGAG TATACTTTCA	180
ACATTAATTc CAGTTGTAGT CATAGCGTTA TTATTTCTTC TCTTCCTAAG CCAAGCACAA	240
GGTGGCGGTA GTGGCGGTG TATGATGAAC TTTGGTAAAT CTAAAGCAAA AATGTACGGT	300
GATnAATAAA CGTCGTGTTc GTTTCTCTGA TGTAGCCAGG GGCCAGATGn AGGAAAACCA	360
AGGnTTAATT GGAAATTGTT GGTTTCTTGG AAAGGTAATG	400

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3003:

10	ATAACATCGG CACAGCAGCT AAAATAACCA TACCCAAAAT GaaTGTATCT TTAAACGTGC	60
	ACCGTAAAGn CTTCCGACTA GCCATGTATA AGCTTTGGCA GCAGATAATT GCTTCGTTGT	120
15	AATGAGTAAT CCTTGGACAA GCGCAATAAA CAACGTTGTC ATCGAAATAC CGATGATTAT	180
	GAGTGTGTC GGGCGTATTT GTCCTTTCGT TTGAAACACT AATAGTATCA TCATTGCAAC	240
	TGCGCCACCT AATACTGCAA ATAGTGGAGT AAATGTATTG TTAAAGGCTG AAAATGCAAT	300
20	AAAGACAACA GCACTTAAGC TAGCACCACC TGTGATAACCG CTAATATCAG GTGAGGCCAA	360
	TGGnnTTTTT TTATACATTT TGGCAACATT TAACCACTTC	400

(2) INFORMATION FOR SEQ ID NO: 3004:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3004.

35	CTAATAACAA ATGCGATGAT GATTAATACT AATTACCTG CTGCTAACAGAATCTCCA AGGAATGAGA AGAATGGTTG ACGTTCAACT TCATTGTTTT TAAGACTGTA GATAATATCT TCTTTCTCTT CAACACTTAC TGGATTCAAC AAGCATGACA CAATAATCGC GTTAACGGAT	60 120 180
40	TCTTTAGTGGA ATTGCCGTTA GTACCAGTTC TCCTGGTACC ATTTGTACAT ACGCACCTAC AATAGCTCCC GATAACAGAGC TCCATTGACA TCATTGCGAT TGTTAATACA CGCATTTCAT	240 300
	TTCAGACGTT TTAGTTGCTC ACTTGGATAC GGGCTAAnGC TTnCGTGAAT TGCC	354

45 (2) INFORMATION FOR SEQ ID NO: 3005:

- 50 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5	GGTCAGCTTA TTGAACAAGG GACACGTGAA TCAGTCTTGC ATCATCCAGA ACATGTTTAT	60
	ACGAGATTAA TTATCAACGA AGAAGAAGAT TAATGATCAT TTTAACATG TGATGAGGGG	120
	TGATGTACAT GATTAAAATT AAAGATGTTG AAAAGTCATA TCAAAGCGCA CATGTTTTA	180
	AGCGTCGTCG AACACCTATC GTGAAAGGTG TGTCAATTGA GTGTCCAATC GGTGCGACGA	240
10	TTGCGATTAT CGGAGAAAGT GGTACGGnTA AATCGACGTT TGAGTCCTAT GATATTAGGT	300
	ATTGAGGAAC CGGATAAAGG TTGTGTACCC TTAAATGATC CACCGATGCh TAAGAGGAAG	360
	TGAGCCGCCA CCnATTGG	378

(2) INFORMATION FOR SEQ ID NO: 3006:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 1785 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3006:

25	ACnTTAGTTG GCCAAGCCTT TATCCGGAAT TATTGGCCT TAAAGCCCCC TTAGGCGGTT	60
	TTTTAAGTCT GATGTGAAAg CCCCgGCTCA ACCGTGGAGG GTCTATTGGAA ACTGGAAAAC	120
30	TTGAGTCAG AAGAGGAAAG TGGAATTCCA TGTGTAGCGG TGAAATGCGC AGAGATATGG	180
	AGGAACACCA GTGGCGAAGG CGACTTTCTG GTCTGTAACT GACGCTGATG TGCgAAAGCG	240
	TGGGGATCAA ACAGGATTAG ATACCCTGGT AGTCCACGCC GTAAACGATG AGTGCTAAGT	300
35	GTTAGGGGGT TTCCGCCCCCT TAGTGCTGCC AnTAACGCAT TAAGCACTCC GCCTGGGGAG	360
	TACGACCGCA AGGTTGAAAC TCAAAGGAAT TGACGGGAc CCCCACAAAGC GGTGGAGCAT	420
	GTGGTTTAAT TCGAACGAAAC GCGAAGAACC TTACCAAATC TTGACATCCT TTGACAACTC	480
40	TAGAGATAGA GCCCTTnCTT CGGGGGACAA AGTGACAGGT GGTGCATGGT TGTGCTCAGC	540
	TCGTGTCGTG AGATGTTGGG TTAAGTCCCG CAACGAGCGC AACCCCTTAAG CTTAGTTGCC	600
	ATCATTAAAGT TGGGCACTCT AAGTTGACTG CCGGTGACAA ACCGGAGGAA GGTGGGGATG	660
45	ACGTCAAATC ATCATGCCCT TTATGATTIG GGCTACACAC GTGCTACAAT GGACAATACA	720
	AAGGGCAGCG AAACCGCGAG GTCAAGCAAA TCCCATAAAG TTGTTCTCAG TTCGGATTGT	780
	AGTCTGCAAC TCGACTACAT GAAGCTGGAA TCGCTAGTAA TCGTAGATCA GCATGCTACG	840
50	GTGAATACGT TCCCGGGTCT TGTACACACC GCCCGTCACA CCACGAGAGT TTGTAACACC	900
	CGAAGCCGGT GGAGTAACCT TTTAGGAGCT AGCCGTCGAA GGTGGGACAA ATGATTGGG	960

	TATATTCCGA ACATCTTCTT CAGAAGATGC GGAATAACGT GACATATTGT ATTCA	1080
	GAATGTTAT TTAACATTCA AAAAATGGG CCTATAGCTC AGCTGGTTAG AGCGCACGCC	1140
5	TGATAAGCGT GAGGTCGGTG GTTCGAGTC ACCTAGGCC ACCATTATTT GTACATTGAA	1200
	AACTAGATAA GTAAGTAAAA TATAGATTT ACCAAGAAA ACCGAGTGAA TAAGAGTTT	1260
	TAAATAAGCT TGAATTCTATA AGAAATAATC GCTAGTGTTC GAAAGAACAC TCACAAGATT	1320
10	AATAACCGGT TTAAATCTT TTATAAAAAGA AACGTTAG CAGACAATGA GTTAAATTAT	1380
	TTTAAAGCAG AGTTTACTTA TGTAATGAG CATTAAAAT ATGAAAACG AAGCCGTATG	1440
15	TGAGCGTTG ACTTATAAGn ATGnnnGATA TGTTGAATAT CCATATCTAA AGCTAGATCT	1500
	AAACTTGTT CAAAATCTTC AATCGTCTGT TTGGTAAAT GATACATTAA ATCTAAACTG	1560
	ATTGATTAA TACCTGCGTT TTAGCATT AACACCGAAG TGTAATATC TTCAGTATTG	1620
20	TGCGTTCTAC CTAAAACAGA CAATAACTCC GGCTTGAATG TTTGAACGCC CATTGAAATC	1680
	CCTTTTACTC CATATTCTC TAATAGTTGG ACTTTCTCTT TAGTTAACTC ATCAGGATT	1740
	GCTTCAAATG TATACTCGCC TGTGATTGTA AACGTATCAC GTATT	1785

25 (2) INFORMATION FOR SEQ ID NO: 3007:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 360 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3007:

	TGCAAAAAAC ACAATAACGA TAAATGTTCC CATTGATCCT ACAGCATCGC GAACATTITA	60
	CCTAAGTCTT TTGTATTTT AATTCTTTG CTTAAAATCC CATAAACTAA TCCAGGTACT	120
40	AAAAATACGA CAAGAATAAT TAATCCGACA CCGTTAATTA ATGGCGATCG TCTAGTAAGC	180
	TGCCTGTTT AGCATTCTT AAAAGCTAT GTCAGGAATG GCTGTAATAA TTAATAAAAT	240
	AATTGnGCTA TGAACGTGATA TTTGCCATT TAAAATGAT GCTCTTGTG AGAATATGTG	300
45	AGATGTrCTC ATGGCATCAT GCATTAAACT GCATCATATT TTCCTAATCT AGGATAATGA	360

(2) INFORMATION FOR SEQ ID NO: 3008:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3008:

TTGCCTTCAA ACACATACTT GTAGTCGGAT GATCACCTGT TCCAAAAGnC ATACCTGGGT	60
CGAGCTCAAT GCAAAGCTCT TCATCCGCTT CTTTAGCATA TGTTTCCCAGA CTAGGAACTA	120
TGTGAACTT CTTCGACGCT CGGGAATGGA TGGAAATAGT TTTTCCATTG ATTTTCCCAGA	180
TCCGTCTCTG CAATAATTG CTCACTGAAT TGAACGTTAT GTTGATCAAG TTCACTCTAA	240
TTTAATAACT CATCTTGAA TTTGCTGTGCG CAACTGTATC ATCATAAGTG CATTTCAGTA	300
AAATAGGCTT nGCAAnCTTA CTCCCTTATC TGGGATAAAG CCTCGGTTTT	350

(2) INFORMATION FOR SEQ ID NO: 3009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3009:

TCTTATATCA CCAGGAATTA ACACGCCTT TTGACCACCTT TCTTCAATCA CTTGGCGTAC	60
TTCTTGTGCA TCTTGTCTT CACTCGGAAG ATAGTTAACG GCTACATCTG CACCTTCTTT	120
AGCATAACGCA ATTGCTGCTG CACGCCCTAT TGCTGAGTCA CCACCTGTGA CTAATTTTT	180
ATAGCCTTGT AAGCGTTGAT GACCTTGGTA AGACGTTTCG CCACAATCGG GTGCTGGCGT	240
CATTTCAGAT TGTAAACCCG GTACCTCTTG TTCTTGTCTT TCAATAATCCG TTGTTTAAA	300
TTTTGTTnA GGATCTkGAG CKGCCATTTT TtGACAYCtC CGTATnCGCT TAATGGGTAT	360
CATTTACCCC AATCTTCCCTA AGG	383

(2) INFORMATION FOR SEQ ID NO: 3010:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 388 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3010:

TAATTCAACG GGAATTTTCC CTTTGAAGTT AACATAACGG TAGGCTGCTT TAACAGCTTC	60
ATCATCGGGC GCTTCGACAT CTTCTAATTG ATATGCAATG CCCAATGTTT TCCACTTATG	120
AACACCTAAC TGATGATATG GCAGAATTTC AAACTTTCG ACGTTATCAA GAGAATTAA	180

TGTCGAATCC ATACCAGGTG GTTTCATATC TGACAGTTG CGCGCGAAGT TAAAGGATGT	300
GTGTATTAGG GCTTCCCCGG TCCATCCAAA TA _n GTTGGT CCATTAATCC ATAAGGTTTT	360
⁵ AnAATCnAAA TAATAATCCA GTCCGGTA	388

(2) INFORMATION FOR SEQ ID NO: 3011:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

¹⁵ (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3011:

ACTGCTGTAA CGTCAGTTGA TCTTTTCATT CTTGGTTAA TTTCTGAGAC GTTACTTGGT	60
²⁰ TGnGCnAnGC CACCAATTGC CATAACGACA GATTGGAAGA ACAATGCATC AGTTCCACCA	120
ACACCAAAGA TGTCACCAAG TACAACGAAA CCTACATATC CAACTGTAGA TACAATTAAA	180
ATACCCATTG CTTTTTTAAA TTCAGGATTA TCTGATTGAC GTnCATTGGT AGCTTTAAGT	240
²⁵ GAAGTAAGTG CTACACCGAT AACTAATAAT ATCATGGCGA TTAAACCAAA GATAATTGAA	300
GTCATTGAAG ACCATTCAAC TAAAAAGATA ACGCTGGAAT AATGGTGTAC CCAACTAATT	360
GGCATAACCTG GTAGGAAACT GGGCATAGGT ATTTGGATAC	400

³⁰ (2) INFORMATION FOR SEQ ID NO: 3012:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

⁴⁰ (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3012:

TTATCGGATT CGTAAATACT GGCGGTTTAC GCAATAGTTT AGATGTAGAT GATAACAATG	60
TGCCTATTAA ATTTAAAGAA GAGTCGAAC CTAGAAAAGTT TGTTTCACT AACGGCGAAA	120
⁴⁵ TTAAATACAA TAGCAATTTC GAAAAAGAAG ACgtACCGAA TGCATCAAAC CAACAAAGTG	180
CGTCAGATTT AAGTGATGAG GAACTTCGCG GAATGGTTGC GAGTATGCAA ATGCAGGTGG	240
CACAGTAAAC GTATTAACAA TGGGATTAGC TCAACCAAAAC GCTATGTTAA CACCACAGTT	300
⁵⁰ GACTGACTGG AAACTACCAA ACCAGTACTG AGGGGnCGTT AATAATGAGT GTTTCCACTT	360
AAGCATAAAC TTTTGTGGT CTTAAACGGC ATTAGTGTGCG	400

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3013:

GGCTGTAATG AAAATCCAAA AGCCAAGCTT ATTTAATTCTG CCTTCATGTG TCGGTGAATC	60
AATAGTGTCT GTATCATGAC TCATGACTTA CAGCCTCCCT TTCTTTAATA CGCGCTTCTC	120
TIAATCTAGC TTCAGTTCT GCAAATTCAG CAGCAGGGAT ATGATATCCG TGATCGATT	180
GGAAACTGCG ATAAATCATA GTACCAAAAA TACCGAATAA ACAAAATTAAT GCTGGAATT	240
CAGTTTCGAA AATTAAGAAG AAACCGCCGA TAGTCATAAA GATAACCAATC CAGAACCTAA	300
CAGGAGTAAT GGTTTGGCAT ATGGATGGCC TTGGnAATAA TGGGTTGnCC TAAGTAATGG	360
CCGACCAAGG TCCTTTCCAn ATCCACCAA	389

(2) INFORMATION FOR SEQ ID NO: 3014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3014:

AATCGCTTCG GTTAACGTGTT CTAACCATTG GTAATAAAACA TGTGTATGAT CAAGCTGAGC	60
TTTAATTGGT TGTGCCTCTT GTGTTTCAGC TTCAGTTAAA TCACTGCTTT CAAGTAATGG	120
ATTGATAATA GCTTGAGCAT CTTTTACTGC TTCGACATTG ATGTCAATT CACGCTGGAA	180
TTTTTTAGTG AAAAAGTTTC GGAAAAAGAT GAAAAAGTCT TTCTCGGCAG TAAAATGTGT	240
TTGGGGCTCC TCTCGTAAAT TGTGGTTAAC AATATCAAAT TCCCTGCAATT CCTAACCGCAG	300
CACTCATACT nGTTGCnCAT TGCAATGATG ACGCATTCAAC AGGGCAACTG CTCAACACAT	360
GGGCATAAAAG TTCCACACTC ATAGGCAACA ATCATGGCGG	400

(2) INFORMATION FOR SEO ID NO: 3015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3015:

5	ncctatctct ggTCGAGAGT CTTTGAGCTG AAAAATGTGA CACACAAAAT TGCAATGGnA	60
TCAACAAATG TTTCCCATTG TGGATGGTCT TGACTAAGTA TTTGGTGTTC AACCTGGTGA	120	
TTGCCATGA CTAATACCAT GTCATTTGTA CTTGTATCGC CATCAACAGT AATCATATTA	180	
AATGTATGGT CAGTCGAAGA TTTAATAAT TGATGAAGTG TATTGATTC AATCGATGCA	240	
10 TCGGTTGTTA TAAAAGCAAG CATGGTAGCC ATATTGGGT GAATCATAACC TGAACCTTTG	300	
GTGCTACAC CAATTGTAAC GGTTTACCAT CGATTTAGT GATACAGCGA TATGTTTGT	360	
15 ACAGGTATCA GTGTTAAAA	379	

(2) INFORMATION FOR SEQ ID NO: 3016:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3016:

25	CATATAAATT GCTAACGTGC CACCATTAC TAAGGAATTG ACATCCACTT CATTTCCTTC	60
TGAATCTTTA AAGTGACCTG TAGAAAATGT CACACTTTA GCAACTGTAC GCATTGTCAA	120	
30 ACCTGTCTGC ATAGTAGCAA CTGCTGCGCT CGCTGATGTC ACCCCTGGTA CAATTCAAA	180	
CGCAATATGA TGTTCATTTA GTATGTCGAC TTCTTCTTGC ACACGACCAA ATATCGCTGG	240	
ATCGCCAAC TTAAGTCTAA CAACCTTGTGTT ATATCGACGC GTGCTTCCAC GATACAGTCA	300	
35 TTATTTTCTT GGCGGAAAAT GTTTGGAAAC GGCTTTTACC AACAnGGTAA TTCAGAGGCA	360	
ATCGCAATGn AAATTACGGn TCACnAACGG TCATTGGATG	400	

(2) INFORMATION FOR SEQ ID NO: 3017:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3017:

40	CCTTTTTCTC TTCTTTCATA TCTGCAAACG TGCATCAATT TTAGGATCTA AATCTCCAAA	60
TGCTTCTGCA ACTGGTTCAAG AGCGTTCATA ATACATACGA ACTTTGGAT ATAACGCTTT	120	

5
TCATTTAAGT GTTCATCACT ATATTTATCA TATGCTTTG TTGCTTGTAA TAATTCTGCT 240
TTAACACCAT CATCTTTTT CGATGTCTTT GAATCATCCT TCTTACTATC GTCGTTCCCC 300
ACATGCAGCA 310

(2) INFORMATION FOR SEQ ID NO: 3018:

- 10
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

15
(xii) SEQUENCE DESCRIPTION: SEQ ID NO: 3018:

TCGCTTTGTA AATTCTGGAA CAAAGnCACT CATGACAACA ATTCTGTGTTG CACGTGCATA 60
20 TACTAAAAGA AATAAAATTA TAAAATTTGC TGGATCTTAT CATGGCCATT CTGATTAGT 120
ATTGGTTGCA GCAGGTAGCG GCCCATCTCA GCTCGGTTCT CCAGACTCAG CTGGTGTCC 180
AGAAAGCGTC GCACGTGGAA GTCATTACTG TACCTTTCAA TGATATTAAC GCCTATAAAG 240
25 AAGCAATTGG AATTGGGG TGATGAAATT GCCGCAGTAT TAGTAGAACCA AATTGTTGGT 300
GAACTTTGGG AATGGnnAAT GCCTCAACCT GGGATTTTA GGAAGAGGGT 350

(2) INFORMATION FOR SEQ ID NO: 3019:

- 30
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 400 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

35
(xii) SEQUENCE DESCRIPTION: SEQ ID NO: 3019:

40 ATATCATGTG CCAGTGAAAG CGGCACTGGn CGGATATGGC GCACATATGG ACATTATGAA 60
AGAGTACCAA TTAATCATTT TAGGCCACA AGTTGCGTCT AACTATGAAG ATATTAACCA 120
AGATACAGAT AGATTAGGTA TAAATTAGC GARGACTCAA GGTGCTGAAT ATATCAAATT 180
45 GACACGrGAT GGCCAAGCAG CCCTTGATTT CGTTCAACAA CAATTGAAA ATTAAGAATA 240
GGAGTTTTTC ATATGACTAA AACATTACCT GAAGGATTTT ATTTTGTTG GAGCAACAGC 300
AGCATATCAA GCAGGAAGGT GCGACCAAAT TACGGGATGG GTTAAAGGTC GCGTGCATTG 360
50 GGGATACGGT ATTTAGGAA GGAAAACCTTA TTTGGTACCA 400

(2) INFORMATION FOR SEQ ID NO: 3020:

- (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3020:

10	ACGTTCGTCT TACGTTAAC GCCATACGGT GTATTAGCAA TTATGGnCCA ACACATTATC	60
	GACAAGTGAC TTTGGCGCCA TTTGGACTTT AGGAAAAATT CTTAATCGCA TCGTACGCTG	120
	CATTAATTAC GATGTATAATC ATTCACTTAA TTATTTAAG CCTGTTAGGT ATTAGCCAA	180
15	TTCGCTATGT TAAAAAGACT TTGGAAGTAT TAATCTTGC ATTCACATCA CGCTCAAGCG	240
	CGGGTGCCTT ACCAATGAAT GTACCAACAC CAACCAGACG TCTAGGCGTG CCAGAAGGTA	300
	ATGnCAATTT CGCTGCGACA TTTGGAATGG CGATTGGACC AAATGGGTGG GCAAGnAATT	360
20	A	361

(2) INFORMATION FOR SEQ ID NO: 3021:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 356 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3021:

25	CAATGACCAT GACCAGTTGA TTTGGAACAA TGATTGACAT TGGAGCTATG CATCAAGTTT	60
35	GTCTTTAAGA CTACTAAACC CACGAACCAT GTTAACCCCG TGGTGCACCA TCACCAATTG	120
	nCTCGATCTA ATTCAAGTTAA TTCAGATTCA TGTTTTTAA ACGTTTCTTC TAAATTAAAT	180
	AAACGTGnCT TTCATATCAT TCACTTTCA TTGTGnCCAC CTCATAAAATG TATATTATCA	240
40	TATTCACTCT TATTAAGTA TGACTGTTGT TGGTGTAAA AATGCTCCAA ATATTGGTT	300
	TATTAGGCAC GATAGTTATA GAAAAACCTG ACAGTCTAAA GATGTCAATAT AATCAC	356

45

(2) INFORMATION FOR SEQ ID NO: 3022:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3022:

55

5 GTGTTGGTC CAATATCCAT ACCTTCTGG nTCTGCTGGA ATTGAATCAG ATGGTACTAC 120
 AGTGATTTG GCATCATTAG nAAAATTCTT TAGTCAACTT TAGTGTCTAC TGGTAATACA 180
 ATTTTATCAC CATGTTTTC TAATAAAATCT TTTGCGAGTC GGATTTTATC TTCTTCTAAT 240
 AATGAAATAC CAATTCCTT ACCTTGCGCT TTTAAGAAAG TATAAGCCAT ACCTCCGCCG 300
 ATGATAATT TATCAGCTAT GTTAACATAA AA 332

10 (2) INFORMATION FOR SEQ ID NO: 3023:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3023:

AAAGGTATT CACAAGAATT AGCTTGCAA AAATGCCAA GCAAACAGAA GATGGnACAA 60
 TTTAAAGTn CCTACAATCA TGAATGAGGA GGACGCGTAA GATGAGCATT CGCTACGAAT 120
 CGGTTGAGAA TTTATTAACT TTAATAAAAG ACAAAAAAAAT CAAACCATCT GATGTTGTTA 180
 AAGATATATA TGATGCAATT GAAGAGACTG ATCCAACAAT TAAGTCTTTC TAGCGCTGGA 240
 TAAAGAnAAT GCAATCAAAA AAGCGCAAGA ATTGGATGAA TTACAGGCAA AAGATCAAAT 300
 GGATGGCCAA T 311

30 (2) INFORMATION FOR SEQ ID NO: 3024:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3024:

ATTAGACATT ACAAGGTGCA GTACGTGCAA CATATTAGAC ATATTGAATT AAGTGGTCAT 60
 GnAAGGTATT GACAGTTAAA AAAGTTGAAC AATTAGAAGA AATCGAGGGC TTAATATTAC 120
 CTGGTGGCGA GTCTACAACG TTACGTCGAT TAATGAATT ATATGGATT AAAGAGGCTT 180
 TACAAAATTC AACTTACCT ATGTTGGTA CATGCGCnGA TTAATAGTTC TAGCGCAAGA 240
 TATAGTTGGT GAAGAAGGAT ACCTTAACAA GTTGAATATT ACTGTACAAC GAAACTCATT 300
 CGGTAGACAA GTTGACAGC 319

- (1) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3025:

GGTGCCAAGC AATAAATATG ACTATGCTCA AACTGAATTAA	ATGGTGGGTG TGTGCCATC	60
GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA	AGGTAGCATA	120
TGTAATTGTT TGTGTTTACG TATTTCTGGT GGTAAGTTCC GTGAAACCCA	ATGTCTATAT	180
TCCCATTAA TACCGCTATTT ATAAnTGTGT CATGTTCTAA TAAGCTCGGT	ATGACATGTG	240
TATCATTTCG TAAAATGAAC GTTTGGATAA GNGGGAGTAA	CATGTGGGAT ACGTCACTCT	300
CATCAAGGCCA TGTAGATACh		320

(2) INFORMATION FOR SEQ ID NO: 3026:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3026:

TCTCAACAAA TGCATCCAGT ACTTAAATTG GCATTATAGT AATTAAAGnA CAATATATCA	60
ATATTTCTCC TTATCCAGCA ACAGCAAATT TATTGGTAAG GTGTACGATT GAACCTTTAG	120
TCAATGAAGC AGGTACATTG GGATTGGCCA GGTGGATTTA CTTCAACTGA GCGCTTTGTG	180
AGAATGGGCA TTTATGAAAG CAAACATTGC TCAAAACAAT GATAAAGAAA TGGATTAAAT	240
GAATGCATTT TATTTATTAG ATGCGGTAAA TATAACGATT GGAATTGTAC GTCCGCATGA	300
TGCTGACAAAT CACTATACGA TGTATCCA	328

(2) INFORMATION FOR SEQ ID NO: 3027:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 322 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3027:

ATTGAAAATA TGTGTTCTnT GTAAAATTT AATCGTTCGC CACGATGCTG TTGATAAAAA 120
 TTCAAAAACT GGAGTTGATC TTCTAGTTCA ACATAATCAT CGTAATTAGA CATGTAACCT 180
 5 TTGATTAAGA TTTCAAGTAC ATGATCTTCG ATAGTATTGn TTTTAACITG TTGTTGAGCC 240
 GCTATATCTT CCATCGTGGAA ATTGTTCAAG CAATTITGTA TAAGTAATAT AAGTTCGATT 300
 TAATGAATGT AGGTTTCATT AT 322

10 (2) INFORMATION FOR SEQ ID NO: 3028:

- (i) SEQUENCE CHARACTERISTICS:
 15 (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3028:

CAAGAACATCTT ATACTTATCA AAATTTATAC TGTGAAGCGA GTCTATTGGC TAAAAGACTC 60
 AAGGCTTATC AACAACTCG TGTTGGCTA TACATAGATA ATTGATTCATC ATCGATCATT 120
 25 TTAATACATG CATGTTGGTT GGCAAATATT GAAATTGCGA TGATTAATAC AAGGnTGACA 180
 CCTAAATGAGA TGACGAATCA GATGAAGTCA ATCGATGTAC AATTGATTTT CTGTACCTTG 240
 CCACGGAAAT TACGAGGGTT TCAAATTGTA TCGCTGGATG ATATTGAATT CGCCChCCGG 300
 30 GCnTATTACA ACG 313

40 (2) INFORMATION FOR SEQ ID NO: 3029:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3029:

CTTCCAAAGA AAAGACCACA GTTTTGACG CATCAATATG GTGCAATTGTT AGAGACACTG 60
 TAGTTGCAGA AGATGGTTCA GTTGGACTTT GAAGACAATC GTTATACAGA AACACGCGTG 120
 50 CCGCTTATCC AATTAATCAC ATTGACAATA TTGTAGTACC ATCTAAAGCA GCACATCCAA 180
 ATACAATTAT TTTCTTAACG GCGGATGCAT TTGGTGTAT TCCACCGATT TCAAAGTTAA 240
 ATAAGACCAAG CAATGTATCA TTTCTTGAGT GGTTCACTTC TAAATAGCTG GnCAGAGCGT 300
 GGTGTGACAG ACCTGACCAT CATCTCAACA TGTTGnGCA CCGTCTTCCG TACATChACT 360

(2) INFORMATION FOR SEQ ID NO: 3030:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3030:

 TGATGGATTG GCTAGCAGGT GTTTACATTA ACTCATTAAGA TGTTATTACAC TACATGCACG 60

 15 ATAAAATACAG CTATGAACGT ATTGAAATGG CATTACATGA TACAGAAATT GTACGTACAA 120

 TGGCAACAGG TATCGCTGGT TTATCAGTAG CAGCTGACTC ATTATCTGCA ATTAAATATG 180

 CACAAAGTTAA ACCAATTCTGT AACGAnGAAG GTCTTGTAGT AGACTTTGAn ATCGAGGGCGA 240

 20 CPTCCCTAAA TACGGTAACA ATGACGACCG TGTAGATGAT ATTGCAGTTG ATTTAGTAGA 300

 CGCTTCATGA CTAATTACGT GGTCATTAAA CATATCGTGA TTCAGACCTT CCATGGGnGT 360

 ATTACCATTA CTTCAACGTG GTnTCGGGTA GAAACTGGGT 400

25 (2) INFORMATION FOR SEQ ID NO: 3031:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3031:

 nGCCTTTAAT CACATCTTT TGATAATGTT CCCTTACCAT TTCTTCATGT GCATCTGCAT 60

 AGTCTTTTCC AAATGGCAAA CTAAACTGAT ATGCAACTTT TAAATAGGCA TCTATATGCG 120

 40 ACTCGTCAAC GATGGCAATT TCAACGTnA GTTACGGGA CAAATTGGCA AGCGCATCAC 180

 TTTCTATGGC ATACAATTCC ATAATACCTA GTTCAAAATT CATATCTTTA AAACATAGCC 240

 ATCCAATGGA TTATCAAGTT GTTCATTTTC CGGGAAAATC nAAACGCATA AATGATTGG 300

 45 AACCTTGATT TGTATGTGA 319

50 (2) INFORMATION FOR SEQ ID NO: 3032:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3032:

5	AAGAAGTGGC AATTATGATT GATGCTCTAG CTGACAAAGG GAAAAAAGCA TTAGAACAT	60
	TATCTAAAAA GTCACAAGAA GAAATTGATC ATATTGTTCA TCAAATGAGC TTAGCAGCTG	120
	TTGATCAACA TATGGTGCTA GCAAAATTAG CACATGAAGA AACTGGAAGA GGTATATACG	180
10	AAGATAAAAGC GATTAAAAAT TTATACGCTT CTGAATATAT ATGGAATTCA ATAAAAGACA	240
	ATAAGACAGT AGGGATTATT GGTGAAGATA AAGAAAAGG ATTAACGTAT GTAGCGAAC	300
	CAATTGGTGT TATTTGTGGT GTTACCGCCC ACCACCAAA TCCCTACGTC CGACCACCTA	360
15	TTTTAAAGC CGATGGATTT GCCATTTAAG ACnGGGAATC	400

(2) INFORMATION FOR SEQ ID NO: 3033:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3033:

	TAGCGGTAAT CGAAATTGGG GACTAAATTG CGCAAAAGCG GGTGCGCACGA TATCAGAAAGA	60
30	GTATAATGTC CCTTTATTAA TGAAGTTGA GTTACATGGA AAAAACAAAG ACGTTATTGA	120
	ATTTAAGAAC AAGGTGGTA ATTTTAATGA AAACCATGGA AGAGAAAAG TACAATCATA	180
	TTGAATTAAA TAATGAGGTC ACTAAACGAG AGAAGATGGA TTCTTTAGTT TAGAAAAGA	240
35	CCnGAGCTTT AGTAGCTTAT TTAGAGGAGT AAAAGACAAA ACATCTCTT CGACACTGAA	300
	TCG	303

(2) INFORMATION FOR SEQ ID NO: 3034:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3034:

50	CTnCGCTATT TTGTAGGACA TCTTCTAAAG TGCTAGGnGA AGAGATTATA GAATAGGCAC	60
	TATCAATACC GAAATCGTAA ACATGTTGAT AATTTTCGCC TAGACTGCCA CAAATCGCGA	120
	TGACAGGAAT ATGATATTGT TTTGCAGCTA ACGCAACGCC TGACGGGTGT TTTACCAAAG	180

TGATGAAAAT CTGTAATGTC AAAGACGGAC ATCAATGACT TTTGTTGAAA GTTGTCTCAC 300
 AAAACGnTAA TGAATGCTGC GGCCCAGTCAGCTG 340

5 (2) INFORMATION FOR SEQ ID NO: 3035:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3035:

AAAGAACATG GTGTAGCAAT AGTCTCTGGA GGTGGAAGCG GACATGAACC TGCGCATGCC 60
 GGTGTTGTTG CAGAAGGTAT GCTAGATGCA GCGGTTTGTG GCGAGTATTT ACATCACCTA 120
 20 CACCTGATAA AATATTAGAA GCTATTAAAG CAGTAGATAC TGGTGATGGT GTATTACTAG 180
 TTGTAaaaaaa CTATGCAGGT GACGTGATGA ATTCGAAAT GGCAACAGAG CTTCCAGAAA 240
 TGGAAAGGTAT AAATGTTCAA ACTGTTATTG TTCTGCTGnCGn CATTGCTGTG ACAAAACGnGT 300
 25 ACA 303

(2) INFORMATION FOR SEQ ID NO: 3036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 30 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3036:

GGGGAAAGTA AATTAACAGC TGTGTAGAAT AATTAAGGTT TTAATTATA TAGAACAACT 60
 40 TATTGTAAC TTTTCATTTC TTAAAGTTA CAATGGTGT ATAATAATGG TCATGAAATA 120
 CGAAAGGAAG GAAAAAAATGA CnACAAAACA GTTAGTATAT ACAGCTTAA TGACAGCGAT 180
 TATCGCTAGT TTAnGATTGG TACCGGTAAT TCCACTACCA TTGnCTTCAG TACCAATTGT 240
 45 ACTTCAAAAC AGTGGTATTT CTTAGCAGGG GCGATTTAG GACGTAAATA TGGCACATTA 300
 AGTGTATCG TCTTT 315

(2) INFORMATION FOR SEQ ID NO: 3037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 50 (C) STRANDEDNESS: double

65

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3037:

5 GCACCAATTG ACGAAGGAAT ACCGAATCCC ATTGTTCCCTA AACCACCGCT TGTAACCCAT 60
 TGTCCGTGAT TTTTAAATGG ATAAAATTGA GCTGCCACA TTGATGTTG TCCCACGTCT 120
 GTAGTAACAA TTGCTTCACC ATTTGTAATT TTGCGATAT ATTGATTGTT TTGTTGTGGC 180
 10 TTACAAAATA CTTGATCTTC TTCACCAAGT TTAAATGGGT GTTTCTGCTT ATTATTTGGA 240
 CAATGTTAA CCCAGTCACT GTGTTCTATA GTCTAACAT TTTTATCATT TAAACCCnTCC 300
 AAAAAACCTT TACAnGCCnG CAAAAAAACC 330

15 (2) INFORMATION FOR SEQ ID NO: 3038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 334 base pairs
 20 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3038:

GTGAGTCCAC ATAATAACTT TGACGTCCCTG TTAATGTTCT AAAAGGTACT AGACGTTCTA 60
 TATTCGTTGT AAATGGTGAA TATCGTCGAC CTTGTTTATT TGAACCTGGG AATACTGCTG 120
 30 TCGGTATTAC TTCTCGTGGT TGTGAAGTTA TATTTAAAAA CGAAATTTTC TCAGCAGCGC 180
 TGTGCTAGA AATATCTTT AACGGCATTC CAGTTGTTC TTCGAGATCT TCATATGGAT 240
 TTTTGTGnAT AATTnACCAT TCGTAGCAGA TGGAAATACT TGAGTATnGG CATCAGCGAC 300
 35 ATTGACGTGC TGTATCAATA CGTGGACGAT TCGC 334

(2) INFORMATION FOR SEQ ID NO: 3039:

- (i) SEQUENCE CHARACTERISTICS:
 40 (A) LENGTH: 327 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3039:

GCTCTGATCG TGGTGAATGA AAAAGGTCT TCTCTGTAAT GAATTATCTC TTACCGATGC 60
 50 AAGATATTAT GAGCATGCAT TGCTCAGCAA ACGTTGGTGA AAAAGGCGAT GTTGCATTAT 120
 TCTTTGGTCT ATCTGGCACT GGTAAAACAA CCTTTATCGG CTGACCCACA CCGTAAACTA 180

ATGCAAAAGC AATTAATCTT TCCAAAGAAA AAGAnCCACA G_nTTTTGGGA CGCATTCAA
300
TATGGTGCA_n TTTAGAGAA CACTGT_A
327

5 (2) INFORMATION FOR SEQ ID NO: 3040:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 305 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3040:

GTGATATTCA CGAnCGTTAT TTTCAATATT TGATAAGTAG AAAnTATGAC GATCTTCATG
60
AACAGCATCT TGTTCTTCGT CAAATTCAAC GTCATAAAA CGTTTGAAGA ATGTTTCATA
120
20 TGCATCAACA GATACTTCAG TACGGTTATT TAATAATGCT TTATGTGCAG CTTGGATCTA
180
AATGATCTTT GTAGCCITCA ACTnAATGTC GCACTATAAA ATTACACCAAC TGAACCTGAG
240
CCATAACTGA ATAAACCGAT TGTTTCCACC AGCTTGTGAA TCTCGATTTT CAAGTGAATG
300
25 ATATT
305

(2) INFORMATION FOR SEQ ID NO: 3041:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3041:

GTTGTGTACC TTAAATGATC AACCGATGCA TAAGAAGAAA GTGAGACGTC ATCAAATTGG
60
40 TGCTGTATTT CAAGATTATA CGTCATCATT ACATCCATT CAGACTGTTA GAGAAATCTT
120
ATTGAAAGTG ATGTGTCAAT GTGATGGACA ACCTAAAGAA GTTATGGAA GTCCAAGCAA
180
TTACATTGTT GGAAGAAGTC GGTCTATCTA AGGCATACAT GGATAAAATAT CCTAATATGT
240
45 TATCAGGTGG AGAGGCGCAA CGT_nTGCAT nTGCnCGTGC AATATGTATT GAACCC_nGAA
300
ATATATTTG TTTGGAT
317

(2) INFORMATION FOR SEQ ID NO: 3042:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 351 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3042:

5	AATCTTCGAA AAATAATGCA ATGCAGATTG CGAAAAAAAC AATATGATAG AAACACCTCA	60
	ATTTAAATACA ACGGCTAATG ATACATCTGA TATTAGTGCA AACACAAACA GTGCGAATGT	120
	AGATAGCACA ACAAAACCAA TGTCTACACA AACGAGCAAT ACCACTACAA CAGAGCCAGC	180
10	TTCAACAAAT GAAACACCTC AACCGACGGC nATTAAAAT CAAGCAACTG CTGCAAAAT	240
	GCAAGTTCAA ACTGTTCTC AAGAAGChAT TCTCAAGTAG GTTATTAAAA CACGGATGGT	300
	GCTAATAGCT TnGCAACAAAC GTGGGCTTTA AAATTCTCCA ACTTTAGTTT T	351

15 (2) INFORMATION FOR SEQ ID NO: 3043:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3043:

25	ACGnCCTTAC TGGnTACTTG GTTGATAAGT GTTAATCCAA ATGACGTCCCT GCTACGTACA	60
	GCTTTACGAA TATTTAATGC ACGTGTGATA TTTTGAGAAA ATACACCGCC TGGCTAAACC	120
30	ATACTCAGAA TCATTAGCTA TATCAATTGC TTCTTGATCG TCCTTCACCT TAATCACTGT	180
	TAACACTGGT CCAAATATTT CTTCTTGTGC TAATTGTGA TGATTGTCTG GCACnCAATT	240
	AATGTCGGCT CAAAGAAGAA CCCTTTATCT AATCCATTAA CAGTTAACCG ATGACCCGCT	300
35	GCTAAAATTT GTGCATCCG	319

35 (2) INFORMATION FOR SEQ ID NO: 3044:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 342 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3044:

45	GTCATATAAT CTAACATTG TGTTATCTGT TAATTAACGT GnTTTTACCT TAATTGTTA	60
50	CATTGnTCTG TATTAATCT TTTTGTAACC ATTGGTTACT TTTTCAGGTG GAATTCAAC	120
	ACCCATGTCA CCACGTGnCA ACCATTAAAC CATCAGACAC TTCAAGAATT TCCGCAATAT	180

AAATTACG A TTTCTAAA CATCACTAGG TACGACGTAC GAAACTTGCT GCAATGAAGT 300
CAACATTTTC TTTAATACCG AAACGGATAT CTTCAGCATC TT 342

5 (2) INFORMATION FOR SEQ ID NO: 3045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3045:

TAATATCATG TTGTGCTTT AGTGCTTCGG CAATTGTTT TGTACTTACT GACCAAACA	60
ATTTACCAACC TTCACCAGTT TTTGCTGATA CTTCAACTTC AATGTTGAT AACGTTCTT	120
TTAATGCTTT ACATCTCAA TTTCTTGTG GCGTTCTTGT TTTGCACGTT TTTCTGTAA	180
CTCTAATTGT TTAAGGTTAC CTGGTGTGTC TTCTACAGCA TAATTCTTT TCAATAAGAA	240
GTTATTGGC ATAACCTACT GGTACTTCTT TAACCTCACCC TTTTTTACCT TTACCTTAC	300
CTTTAACAnC TGTGTAAAAA TTACTTTCAT GCAGnTCACT CCTACTTAAA TGTTCCGTAA	360
TGCCCTGTGT AATGTGCCAA CGCnCTCGA CGTGACACCT	400

(2) INFORMATION FOR SEQ ID NO: 3046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3046:

AATCACTGTT TCATTACTTG TTCCAAATCT GnATTCAAAC TATTGTTCAA AGATTCTAAT	60
TCCGCTTTAT TTTTATCTTT AATCGCTTTT GTCATCGCAG CATCTTTAGn CATCGACTTn	120
CTGTTGCAAT AGTTAACATT TAGAACCGC ATCTTTACTA GCCAATTCT CTTCATATAAGC	180
AATTAATGAC TTCGTTAATT GCGAAAGTGT ATCTTTTGA TTATCAITCG CTTTTGCATC	240
TTCAAGCTTT CTCACATCTG CATTGACAG CATTACTTGC ACTATTATCT TCAAGCGATA	300
ATTTCT	306

(2) INFORMATION FOR SEQ ID NO: 3047:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 306 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3047:
 ATGGATCATA TTAGCACGTA AAAGAAAAATT CTGTCATTA TGAAGAAGTG CCAGAnGTTG 60
 AATTTAAACG CACATATGTA TGTGAAGATA TGTCTAAATG TATTTGTTA TACAACGCAC 120
 CTGATGAAGA AGCGGTAnTC GCGCGCGCAA AGCAGTTGAT ACACCGATTG ATGGCATTGA 180
 AAAACTTAA TAAGACAACA AGTTGATGAG ATATATGTAT ATAGGTTGG CATGGATTTC 240
 15 GATTGCAAnTT ATTAGAATAG CTCAAATGCTA TAAATGTAAG TAGTTGATAT TGAGGAACTA 300
 ATGAAC 306

(2) INFORMATION FOR SEQ ID NO: 3048:

20 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 287 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3048:

30	GACAGGCTAC GAGATATTAAACAAATTACATCAAATC CAGTATTAGG TGTTATTGCA	60
	GGTATCGTTG TAACTATTAAATACAAAGT AGTCAGGTA CGACATTATC ACAATCGGAC	120
	TGGTAACnCT GGATTTATGA CATTGAAACA AGCCATTGGA GTGATAATGG GTGCTAATAT	180
35	CGGAACACnCG GTAATGCAT TTATTATCGG TATAGATTAA GGCGAATATG CAATGCCAAT	240
	TTTAGCATTA GGTGCATTCT TGAATCTTTT TCTTTAAACG CTCTAAA	287

(2) INFORMATION FOR SEQ ID NO: 3049:

40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 371 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3049:
50 CATATAAAATA GCGnTACATC GCGCCATTCT TGATCTGnAC ATATCTTTCT TAGGTCCAAC 60
CGTGAATGAT TACGTCCATG ATAACGTACA AACGCAATTT CATTGTGAT TCGATTGACT 120
AAAGGTACAC TGCCATCTTT CACTTGTGGT TCATCAAICTA CTGCATGAAT GATTGTGATG 180

AATTCTACAC ACATTGGAAA GCTTGTAAATG CTGTCTTACA TACAAATATA TTGATATTTG	300
TGCATGCAGT CAAACCAGGCG GAAATGACCA TACCATGCTA ATTTCTGGT AnGAAGGCCT	360
6 ACATATCTAA A	371

(2) INFORMATION FOR SEQ ID NO: 3050:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3050:

CGCCAAATAA AGATAATACA CGTATTGGTG AAGATATAAC TGTAAC TGCA CATATCTTAA	60
20 TTGATGGCGA AACAAACGCCG ATTACGAAAAA CAGCAACATA TAAAGTAGTA AGAACTGTAC	120
CGAAACATGT CTTTGAAACA GCCAGAGGTG TTTTATACCC AGGTGTTCA GATATGTATG	180
ATGCGAAACA nTATGTTAGG CCAGTAAATA ATTCTTGTAG ACAnATGCGC AACATTGAAT	240
25 TTCCAATTTG TTGGAAATAA TGGGCTAACCA AGGTGTTAG GCATATCTAC TCGTCTTATT	300
GGGTGCATAT GTAATGGCAA GCA	323

30 (2) INFORMATION FOR SEQ ID NO: 3051:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3051:

40 CCGnACCAAT CGGTTTACAG TTCATTGGTA ACCATTGCGC ATGAAAAAAC GTTATATCGT	60
GTCGCTTATC AATATGAAAC ACAATACAAT TTACATGACG TTTATGAAAA ATTATAAGGA	120
45 GTGGAAATCA TGCATTTGA AACAGTTATA GACTTGTT CACGTAGAGT TAAAAACGGA	180
CTCAAAAATG TTTCTCCATC ACCAGCGCAT TTnGAGCAGA ACCTAACTCA AATACGAATG	240
GTATCGCTTA GCATATCCAG TGCTTACCAAG TTGTTAATAA GCGTGCGTAG ACGGGCATGC	300
GTGCTGCAAT GCCTAAATAG GAACG	325

55 (2) INFORMATION FOR SEQ ID NO: 3052:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3052:

CTTTTAATCG	CTTGAAACT ATAGGTAAGA CAATACAAGT AGCTACAAAG CCATATATTA	60
10 CTGTTAATTG	ACCTATGAAA AAATATCCGC TAACGGGTGC CGTCAATCCT GCGATAGCAA	120
TACCAATAAA	AAGTACAGTC CACGAAGGAT AAACATTTTC AAGTGAAAAA TCTTTAAAT	180
15 ATTTTATTGA	AAAATAATC ATATGCGTCA TAATCCCAC AAGGCATAAA ATCCAAATAG	240
GCGTATTAAG	CTATTGTAAG GTTTGTTACT AAAAATGTT TTAAATAGTG TnCTAAAAG	300
20 CCGGCATGAA	AATGTGTGAC CTGATGAACt GAGGCTGTTA TTGTCTTCAC TTATTAATT	360
TGTCTAGTCT	AAAGGTGATC CAATCAGAAG CAAGTCCGCA	400

20 (2) INFORMATION FOR SEQ ID NO: 3053:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3053:

AATGAGATGC	GAAGGATGAT CAGAGAAAAA GTCTCTCAAT CAGGTGTGAA AGTCAGATGG	60
TTATCACAAAC	TTTGGCGTAC GTTTTCGATA TAATGCACTA GGTGATTAA ATACGAGCAA	120
35 TATTGTTCT	TCAAAAGAAA GTTTCGGTAT TACTGAAGTG TGAAATCTGT CTCTATGCAT	180
GCCGGATCGA	CATTAGCATT ACTAATCCAG AGAAAGCAAA AGGTATTGTG TATACACCAG	240
AACATTGCCA	GCGAAAAGTA AATGGTCACA GCTGTAGAnC AAGGTATTAA TAATGGGGC	300
40 GGTAAAGCAG	AAGGCCCTA TGTAGCATT TnTAAAGnTG GGAAAAGGTA AAGCAGCATT	360
ATCGGTG		367

45 (2) INFORMATION FOR SEQ ID NO: 3054:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 382 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3054:

Th	ATTTATCT	nAGCTCATGA	CATGATGGCT	GTTCACATTG	CAAGGCAGTG	ATGATnAAAT	120
	AAGGAAAGGC	ATTAGGAAAAA	AGCCACAGGG	AAAACATTTC	AGCAGCAGGT	TCTTGGAAATC	180
5	ATATATTCAA	GTTCAACAAAG	CGAACATGCTGT	TAATTCGCCC	TTTGGATGAC	AATCAATTG	240
	ATATCGTTT	AAATGAAGCA	ATGTTAACAA	TGTTACCCAT	CGCCATAAAG	AAAAAAGCAT	300
10	TACCGAGTA	CTACCGAGTC	TAAAGCCTGG	GGGTATCTGT	TAACACATGA	TATTGTCATC	360
	GTAAATGAAT	CACATGCCAC	AC				382

(2) INFORMATION FOR SEQ ID NO: 3055:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3055:						
	CTTAAGAGATTA	GGTGTGCTTA	ATTAGTACTG	GCTGGGAACG	ATAAAGGCAT	ATTGCAAAAAA	60
25	ATAGAACATC	CATATCCATT	AAATGTATTT	ACGCTAAATA	TTGnCGACTT	ATATTTTTAG	120
	ACATAGAGAA	GAGACAAGAC	AATTTTTAAC	GATGCAACGA	CAGTTAGGCT	GAGGCAGTTA	180
30	AAACAAATAT	TTGATACACA	TGTTGnCAGA	AAAAGTCAG	TGTTCCCATC	AAATGChAAT	240
	TTTGTACTAC	TAAAAGCTCA	GCAGCGCAAC	AATTAGGACA	ATACGTATAT	GAACAAGGGA	300
	TTTAAACCTC	GCTTTT					316

(2) INFORMATION FOR SEQ ID NO: 3056:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3056:						
	GTTCACCATC	CGTTTATTTTC	AATGAAAAAA	TCGACAAAAAA	TGGTCGTGAA	AACTATGATG	60
45	CAACAATTAT	TCCAAACCGT	GGTGCATGGT	TAGAATATGA	AACAGATGCT	AAAGATGTTG	120
	TATACGTACG	TATTGATAGA	ACACGTAAAC	TACCATTAAC	AGTATTGTTA	CGTGCATTAG	180
50	GGTTCTCAAG	CGACCAAGAA	ATTGTTGACC	TTTAAGTGAC	AATGAATATT	ACGTATACTT	240
	AGAGAAAGAC	nGCACTGAAA	ACACTGACCA	GCGTATTAGA	ATCATGACGT	TACGTCCAGT	300

CTTAGCAGCG TGGGnCGTAT

380

(2) INFORMATION FOR SEQ ID NO: 3057:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 327 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3057:

15	TATGTGATGG ACTTAAAAAA ACGAACTCAA TTAATACAAT GGGCTCAAGA AAAAGAAGAA	60
	CGATTTATTA TAGAAGATGA TTATGATTCC GAGTTAGAT ATTCGGCAA ACCCATTCCA	120
20	GCAATTCAAG GTCTATATTTC AAGAGGGAGAA AAAGTGATTT ATATCAGTAC ATTTTGCAAA	180
	GTCTATTTT CCTAGCTGTT CGAGGTGGCA TATATGGTGT TACCCTATTTC TATHATGGAA	240
	AAAATATCAT TTCTnCAAAA TCCACCATTG GAAGGGCAAC ACTGGTAACC TGTTTCATAT	300
	GGCAAAACCT TATTGGCAAC GTTTnAT	327

25 (2) INFORMATION FOR SEQ ID NO: 3058:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 284 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3058:

	CGAAAAGGA GAATGAAACA TGAGGTAATA CAACATTACA TGCAACAACA ATTTATGCGT	60
	GTAAGACATA ATGGAAAGCA GCTATGGCTG GAGATGGCA AGTAACGCTT GGTTCAACAA	120
40	GTCATCATGA AACAAACGGC AAGAAAAGTG CGACGTTTAT ATGAAGTAAA TGTTAGCTGG	180
	TTTCGCAGTA TGTAGCAGAT GCGTTTACTT ATTTGAAAAA TTCGAAACAA nATTACAACA	240
	GTTTAGTGGT AACTTAGAAA GAGChGCTGT TGAATTGGCA CAAG	284

45 (2) INFORMATION FOR SEQ ID NO: 3059:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AAAGAAGCGG ATGAAGAGCT TTGCATTGAG CTCGACCCAG GTATGGCTTT TGGAACAGGT	60
GATCATCCGA CTACAAGTAT GTGTTTGAAG GCAATAGAAA CATATGTATT GCCACAGCAT	120
5 TCAGTAATTG ATGTTGGTAC TGGCTCAGGT ATATTAAGTA TTGCAAGTCA TCTAATCGGT	180
GTAAAACGTA TTAAAGCGTT GGATATTGAT GAAATGGCAG TGAGTGTAGC TAGAAGAnAA	240
10 CTTCAGAAGA nATCATTGTG AACGTTGAAT TGGAAGCTGT TCCAGGTTAA CATATTGGAA	300
AG	302

(2) INFORMATION FOR SEQ ID NO: 3060:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 330 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 TTTTTAAnGA CACATTGnGC TGTGTTTAAT GCATGAAAGG ACCACTGAC ATGCATnAAA	60
25 TCTTTGAATG GTTCTTTATC AATTCCCTCC CCCCTCTCAT GTTTTGTATC TTTAAATCAA	120
TATAATTCAA AAAGGGTCGA GGATATGAAA TCACATCTTC GACCCTTTAT TTACTATTTT	180
30 AATTCAAGCCA CACGCAAACG GTIATTTGCT CTCTCTAAAG CTCTTCGGC TCTATGGAAT	240
ATCAGTATTG TCGTCAATCA TTTTCCAAGT GAGACTCTGC TCTTGCTTTG GCTAATTTAG	300
CTCTTCAAC ATCAATTCT CTTGCAGTTC	330

(2) INFORMATION FOR SEQ ID NO: 3061:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3061:

45 CGATCAATCA ATATAATTCA CGCGCAAAA CGTTTATTGA GCATGTTCTT GCAGACTCTG	60
AAACTGGCAT TAAACCTTCC ATTAAGATTT TTACCAATTCT AGGCATTAAT ACCATTACTG	120
50 CAGCCATTGA CATTCTAAA TTAATGATGT CTCCAGGTTT GTAACCTGCT AACACACCAA	180
TACCTAAmCC TAAAATTAAG CCGACAAATA TAGACTCTCC AAATGCGCCA AAACGTTTTT	240
GAATTGnTTC AGGATCAGCA TCTAACTnAT TCAGACCGGG TACTTTTGT AACAAATTAA	300

(2) INFORMATION FOR SEQ ID NO: 3062:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3062:

TATAAAATCA ATGATTAA CAAATAAAA CGTACCGCAA ATACTGAAA TAACAGCAA	60
TACTAGTTT AATAAAATAT GACCGGTTGG AAAGAACAAAT AAAGCAATTAA AAATACCTAG	120
15 TTTAGCCCAT TCCATCGTTC CAGCTGTAGT CGGACTAACAA AACTTATTTC GCATCATTTG	180
TTGGCATTAT CAAGCCTGCT GAAAGCCAAC GAACTTCCAG CAATTAAAAT ACTCATCGTC	240
20 CTTGGTATTC GGGCTTGGAG AATAAAATGA TTCCGCTGGT GACTCAGTTG AAATGTAGTG	300
AAATCTTGA ATTGGATAGT TnCACTGCAC ACCTGATGGn AnCAACGGAA	350

25 (2) INFORMATION FOR SEQ ID NO: 3063:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 342 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3063:

TTAGTGATT TAACTGTAT CGGTAATTTT AAATAATGT TTAATGCTTT TGAAAATACA	60
GTTCTAACCG AAGACGTCGG GTACACTGAA TCACCGGAAA CGCCAAGGTC TTTTATTAAA	120
CCTTGTTCAC TATATTGCAT ATACTGTGGA TGCTGTCGCA ACACATTGAT TTGATAAGGA	180
TGTGTTGGTA ATAAAAATAAA ATCTTTGGGT ATCTCTGATA TATCTATGTC TGCTAATTGG	240
40 ATACnACACT TTCTCAACCT GGATCCTCC TTTTACCTnC CACCATAGCC GCGTGGAnCA	300
GGAAACCATC CTGGGATGCA CCAGCCAAA TAAATGCCAA TT	342

45 (2) INFORMATION FOR SEQ ID NO: 3064:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

GTCCAGCTCC AGAACCAAC TTAACAGTAT TATGGTCAGT ACGTTTACCT GACAACITCA	60
AAACATACTG TGCAAAAATG AGTATTAAAA CAAGTTCTAT CCAATATGAA AATGATGACA	120
5 TTATGCGTGA AAGCTATGGC GATGACTATG GTATCGChTG TTGTGTATCA GCGATGACAA	180
TTGGTAAACA AATGCAATTc TTGGTGCAC GTGCGAACTT AGChAAAACC TTACTTTACG	240
10 CTATCCATGG TGGTAAGATT GAAAATCTGG TGCAACAAGTG GGCCCCAACCT CCGAGGGATT	300
nACCAGCGGA GTAATT	316

(2) INFORMATION FOR SEQ ID NO: 3065:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 322 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

TGATTGCGTG GATCAGCAAC TTCAAAGATT AACAAATAAT ATTACTTGGG CAGATAACCG	60
25 CGCTGAAAA TATGCAACAG TAATAAATGA AGTGCATGAT GGGCAATGCG ATTTACCAGC	120
GnACAAGCAC AnCGGTTCA TCCTATGTCG CCATTAGCGA AGATTTTG ATGAAACATG	180
30 ATGGCCAGAT GTATTTCCAC GTACTGCTAA GTTTGCAGAT ATTAAAACAT ACATTTCTAT	240
CATTATTGAT ACATATATCA TTGATTATTC CATGGCTTCC GCnACAGGGA TGTTAATTAG	300
AACATAGATT GGAGTGAGGC AT	322

(2) INFORMATION FOR SEQ ID NO: 3066:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 373 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3066:	
45 TATAAAAGAAT CCTGCCCTTAC CTAAGAACAC TTGTCTTGTC GTTAAGACTG ACTCTAGACT	60
CTTATGTTTA TTATCAACCG TTAATAAACT TACCATCAAG AGTGCACCTA CCCATACTGA	120
50 CAGTGCAGTA TAGAATGGTG TCATACCTGA ACCATAATCC TTAACTGGGA AAACATCAAC	180
AGTCTTCTTA TTAATAGATT GCAATAATAC CCGCTGCTTT TTCAAATCAT TCTAnGGTC	240
GATTAATTGT CGACGCATCA TCTTGTCAAT TCTTGAAATT TATTCGCTTT TCAACTTTCA	300

CACGCTGACA TAC

373

(2) INFORMATION FOR SEQ ID NO: 3067:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3067:

15	TTCAGAGTTTC GGAACATAAG GCGCTACAAT GTTGTGTTGC CAGTAGTTGA CTGAATATGC	60
	GTTTGTAACA AGCTTTTTTC GATTCTAGTC AACAGTAATT AAATTTATGA TATGGGCAAT	120
	ACTTTGTAAT ACTAATATTA AATGGCGACT TTATTTCACT ATGTTATAAG AGTGCCATT	180
20	GTTGATAAAG GnATACTAAA GGGTATCGTT TGGAATTITA GTAACTAGAT ATGTTCGGGT	240
	ATAGACCGnA TTGTGGATAC GTAAATTIAA TGCAATGAAT TTTAAAATGA AAACATGACA	300
	TTAAATGAAT C	311

25 (2) INFORMATION FOR SEQ ID NO: 3068:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3068:

	TATGATTATC TAGTAAGTAA ATTGCTGACG CGCCGAATAC CGCAAAGAAT ATAAAGCAAA	60
	CTAACGCCGG GACAAAAAGT ACACCTAGGA ATAAATTCTT TAATCGTACG TCCTTTGAC	120
40	ACACGTGCAA TAAATACCT ACAAAATGGGT GCCCAGGnTA TCCACCATGG CCCAGTAAAA	180
	GATTGTCAA TTTGTAAACC ATTGGGAATT TTTGACCACC TGTCGGAATG CGTAAACTCA	240
	TACTTAAAGA AATTGCATT ATAATTACCT AGACC	275

45 (2) INFORMATION FOR SEQ ID NO: 3069:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	AAATGGGTTTC TGTGACATTA ACGTCTACAA AAGATGGTTC AGAAGAAACA CACGAGGCTG	60
	ATGGGTGATT CATCTATATT GGTATGAAAC CATTAACAGC GCCATTAAA GACTTAGGTA	120
5	TTACAAATGA TGTTGGTTAT ATTGTAACAA AAGATGATAT GACAACATCA GTACCAGGTA	180
	TTTTTGAGC AGGAGATGTT CGCGACAAAG GTTTACGCCA AATTGTCACT GCTACTGGCG	240
10	ATGGTAGTAT TGCAGChCAA GTGCAGGGAA TATATTGACA TTAACGATCA GCCTAAntTCC	300
	GAGChGATTA GATGTGAGCG G	321

(2) INFORMATION FOR SEQ ID NO: 3070:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3070:	
	GTTTGACCTG CATATTTGAC AGTCATAACC TTTGTATCAC CATTATATTA ATATCAAAAT	60
25	CTTGGAACGT GTTATTTGAG nTGACATTAA ACTTCGCAGC ATTATCAGCT GTTGAACCTG	120
	ATGTATAACGT TGCAGCAACCC ATAACATATCT GTGTTACAAT GCACCAAACG CACCTCCACC	180
30	AGCTACATTA GATGGGCAGC TTCGCCTTGC AGCTGATTGG TTTAGATGAT TGTGATACGA	240
	TCCAATTGAG AGCCAAATnG TACTTAAGCA CAATCCTACT GCGGACCGTT TAACCCTGTT	300
	TCACCTATAC ACTGnTGAAA GGCAAACCGT ACCACTCACC ATTTCCATGC CTTCCATATT	360
35	TGGTTACCAA ATTTACTTTT CCCnGAAAAA TGAAACTCTT	400

(2) INFORMATION FOR SEQ ID NO: 3071:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 266 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3071:	
	TGGCCATTG TCATTGCATT TTTACCGTGG GTGTTGATTA TTATTCCCTTA CTTACTATTT	60
50	AAATCGGATA CACTAAATAT TATTCTACG GGTGATAATA TTGCACGAGG TCTAGGTGTA	120
	AGGTTAAnCA GAGAACGTTT AATATTATTC TTTATCGCAG TGATGTTATC ATCTGCTGCT	180
	GTAGCATAGC AGGTTCAATT TCGTTTATCG GATTAATGGG TCCGCATATT GCCAnACGTA	240

(2) INFORMATION FOR SEQ ID NO: 3072:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3072:

GAATCCCTGC AGGTCGACGT CTAGAGGATC CCCCCACAGC AATTCACTTA TACATGTAAC	60
AGTGTGAAAT AATAACGTCA CAACGGCATA ATACACATTG CAACGTCCC ACAACATATC	120
ATAGAACATCGT AACGGCATGA CATCAACACC AAACCTGGGC TATAACACCA TAACAGCGCA	180
ACGCCACATC ATAGGCACTA CATCAAGTCG CATCGTAGCA CCAGCACATC AAAGTAACAT	240
GGGCATCAAC ATCAAACCGG TCTATAACAC CATAACACCG GCAATGCCAC ATTCA TAGGC	300
ACTACATCAA GTCGGCATC	319

(2) INFORMATION FOR SEQ ID NO: 3073:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3073:

ATATACCGCTT ATCAGCTGGA GCTCAATAGA TGGAGGATGA TTATGGGGCT ACCGGTTCTG	60
TCTATAGCAC TGGTCTATCA GCTATGTGGA TTACAATCGG TTTAACATTA GGTGCTTATA	120
TAAATTACTT TGTTGTTGCT CCTAGACTTC GTGTTTATAC CGAATTAGCT GGAGATGCAA	180
TTACATTACC AGATTTCTTT AAAAATCGTT TAAACGATAA AAATAATGTG TTAAAGATTA	240
TTTCTGGATT GATTATCGTA GTATTCTTTA CATTATATAC nn	282

(2) INFORMATION FOR SEQ ID NO: 3074:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3074:

AATCGA ⁿ AAA TCATGGATGT ACTTGAATCA AATGCAAACA GCGAAGTGT ⁿ TTGAATTGCA	120
TGGTAGCGTT ATAGACGAGC CAGTAGAAAT TCAATCAATT AAAGTATATG TTCCTAACGA	180
TGATGAAGGT CGTACGACAA CTGTAATTGG TAATGCTTTC CCTGACTCAG AAGTTAAATG	240
CATTACACCA GCAGATATCA TKGCTTCAAT GAGTTACTTC TTTAACTTAT TAAGCGG ^t AT	300
TGGG ^t ATACA GATGATATTG GACCATTaGG TAACCGTCGT TTACGTTcTG tAGGkGGaAT	360
TACTAC ^m AAA CCaATTCCGT ATC ^g GTTTAT CCAAGA	396

(2) INFORMATION FOR SEQ ID NO: 3075:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 376 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3075:	
ACCTACATTT GCAGTTGTCG GTGTATAACC GGCTGGTGTGTT GAAAAC ^t CTA CACTATAAGT	60
TCCATTGCTT AAACCA ^t GTGA ACTGATATT ^t ACCATTTCA TCTGTTGTCG TACGATCTAA	120
TTCTTTACCG TTACTATCTT TAAGAATGAC ATAAACACCT TTAATCCCTT TTTCATGGC	180
ATCTTGT ^t TA CCATCTTAT TTGTATCTCC CATA ^t AGT CACCTAGATT ATATT ^c TTT	240
GGGCGCCATA GCAGTTGATG AGCATT ^t CACA TTGAAAAACT ATTGACC ^t CT ATATTAGTTT	300
GCAGTGCTAA G ⁿ ATAACATT TCCATACGTG ACATACTGAT AGACTGTGAG TGATGTATGC	360
GCTG ⁿ TGCTC ATAACG	376

(2) INFORMATION FOR SEQ ID NO: 3076:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3076:	
TTACATCACC AATTAGACGT TATCCTGATT TAACAGTTCA TCGTTTAATC CGTAAGTATT	60
TAATTGAGAA ATCAATGGAT AACAAAGAAG TGAAGCGTTG GGAAGACAAA TTGCCTGAGT	120
TAGCTGAACA TACTTCTAAA CGTGAACGTC GTGCTATTGA GGCAGAACGT GATACTGATG	180
AATTGAAAAA AGCAGAATAT ATGATTCAAC ATATTGGTGA TGAATTGAA GGTAATGTCA	240

AAnGCnGnGA TATACTTTC AGGGCGCAATG C

331

(2) INFORMATION FOR SEQ ID NO: 3077:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3077:

15	AATCATATGC ATCGATTTC AGCAACAGCA ACCATTCAATC CTATGTCCCA TTAGCAAATT	60
	TTTTGGATGA AACATGAATG GCAAGATGTA TTTCACGTA CTGCTAATTG GCAGATATTA	120
20	AAACATACnT TTCTATCATT ATTGATACAT ATATCATGAT TATTCTATGGC TTCCGCAACA	180
	GGATGTTTAT TTAGAACAT TAGATTGGGA TGTTGAGGCA TAGAACTGCT GGGTATTTC	240
	AAGGAAATGT TGCCGGAATT ATTCCAACAA CTATTGATGT AAGTATGAAA GAACGTATGC	300
25	AACATAATGG GCTAATAAAG TACACCGTnT GTTAATGGTG CnATG	345

(2) INFORMATION FOR SEQ ID NO: 3078:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3078:

	GATTATCAAG CGATTGATCA AGTATCATCA TTGTTGAAAG AAAAATATGG CATTGCACAT	60
	TCAACGTTGC AAATTGAAAA CTTGCAATTG AATCCATTAG ATGAGCCATA CTTCGACAAA	120
40	TTAACATAAA TAAAACATTG TAGCGCCTAA AACATTAATC TATGTCATAG GCGCACGTTT	180
	CGTTTTATAC TTATGTTGCA TCATTTAAAT GATTTTCGTC AATTTCTTTG ATGCTATCTA	240
45	CATCTAACAC GAGGTTAACT TGCCTTGATT TTGATAAAAGT GATCATAGCT TTTAGTACTT	300
	GAGGATTTTT ATTGTTGCTG TTACGAATGT GGTCTATGTTT AATGCGGGAC AGTAATTAA	360
	GTTGTTTTT TACAATTGAG AGTGTGATAT TTCTGATTTCGG	400

50 (2) INFORMATION FOR SEQ ID NO: 3079:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 319 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3079:

5	AAACGTTTAA TATAACACTTT TACACGTCGC CTTCATTGAA GCGAATTGCC ATAACCTTCA	60
	CATTATATAT AGTTCTTCC ATATAAATGT CCAAATTTTT AGAACAAACGC AATAATAAC	120
	CATCCACCTA ACTTATCAAA AATTTAAGTG GATGGTTTT CATTTCATT TATATTATA	180
10	TTAGTGTAA TCCAATCATA GATTTATCTA TATGCACTGC TCTATACATT TCCTCATTAA	240
	ATTTGCyTTA CTTCATTTA TATCATTATC AGAACACTTG GCGTGTACATC GNTATTATTT	300
	CGCATCTTTG AnACGTTA	319

15 (2) INFORMATION FOR SEQ ID NO: 3080:

- (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3080:

20	TCAAATGCAT CTAGGnCACA TTATTCTATT TGGGCATTCT TAGTGCTGTT CTTATTTGCG	60
	GCTTTAACGT CATCTATTTC TTTATTAGAA TTAAATGTTT CTAACCTCAC GAAGAATGAC	120
30	AATACAAAAC GTAAAAAAAGT CGCAGTGATC GGTAGTATTT TAGTATTTAT CATTAGTATT	180
	CCAGCAACCT TATCnTTTGG TATCCTAAAA GATGTAAGAT CGGTGCGGGGA ACGATTTTG	240
	ATAATAAGGA TTCCACCGTT CGAATGTAAT GAAGCCATAA GCGGG	285

35 (2) INFORMATION FOR SEQ ID NO: 3081:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3081:

40	ATCATAGCGT TTCTCCTAAA AATTACGATT AATCAAAGTA TGCCATTATT TAACTTTAGT	60
	TTCTTCAGAA TTATTGCCC CATTATCATG TTTTCTTCT TTATTAACAG CATTTCATC	120
50	ATTTTTAACCA AGATACAATT TACCAATTAA TGGGCGGTGT GCGTGCTGGT ATGGGTTATA	180
	CTGGTTACACA CGATTTAAGA GAATTACGCG AAGAAGCACA ATTTACACGT ATGGGTCCTG	240

CATTCTAATT AAGATAAAAGG AGAACGACAA ATATGGAAA TGGCAAAGGA CCAAGAGTTA	360
ATCCTTGCT TAGGACTTTG GTAGGCCATT ACACCCATTA	400

5 (2) INFORMATION FOR SEQ ID NO: 3082:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 248 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3082:

TGAATTTGCT CCAAATAAAA ATACAATTGC CATTAAAATC ACCAGATATT ACAAGTGGCA	60
ACATGTTAGA AACACCGTTTC ATTAAGTGT TATAGAATGC TTTACCTGGG CCTATTTCCTT	120
20 GACTGTCATT TGAGTTACCT GGCAACAAAA GGTTTACGAC TTGTATCTAA TGAATACCAT	180
CTGCTACTGG TnCTTCTACG ACATTTTAC CATCGAnGCG GTCCGTCTCA ACATGTACAT	240
CAGCAGCA	248

25 (2) INFORMATION FOR SEQ ID NO: 3083:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 368 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3083:

TACTAAAGGT TTAAATCAAA AATGGCTAGG TATCGTATTT GCGATTTAA TTACAATTAC	60
ATTTGCATTT GTATTAAACA CAGTGCAATC TAATACAATT GCGGAGTCGT TAAATACGCA	120
40 ATATAATATT AGTCCAGTAA TCACAGGTAT TATTTAGCA ATCGTAACAG CTATTATTAT	180
ATTTGGTGGT GTACGTAGTA TTGCTACGTA TCCTCGTTAA TGTACCGATA TGGCTATCAT	240
TACATGGTAT GGTTTAGTAA TAATGCTATT AATTTAGACC AATTGTCCnA TGATAGGACG	300
45 ATATAAAAGG CATTGGnACG ACAAGnACTG GTGCGCTGAG GGCTCGGTCT CCAGGACAAC	360
GGGGTATC	368

50 (2) INFORMATION FOR SEQ ID NO: 3084:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3084:

5	TTGGACTTTA TAAAGTTACT AAGTTGAGA TTATCCTGGT AAAGAAGATA TTGCGGTTGT	60
	ACAAGTTGAA GAAAAATCAA CACAACAAA AGGTAGAAAA TTCAAAGATT TCACTAGTAA	120
	ATTTAATATA GCATCAGAAG CTAAAGAAAA TGAACCTATA TCAGTCATTG GTTATCCAAA	180
10	TCCTAATGGA ATAACACAA ATGTATGAAT CAACTGGTAA AGTATTATCA GTGAATGGGA	240
	TATAGTGnAT CGGATn	256

(2) INFORMATION FOR SEQ ID NO: 3085:

- 15 (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3085:

25	ATATGCATAT GCTTCTTTAG GTGAACGAAT ATCTGGTTCA GATACGATTT CAATTAGCGG	60
	TGTACCTTGA CGGTTCAAGT CAACTAATGA ATACTCCACC TTTATGTGTT GACTTACCG	120
	CATCTTCTTC CATGTGAAGA CGAGTAATAC CGATTCGnTT TGTTTCACCG TCGACTTCGA	180
30	TATCGATATA TCCCATTTC CAACATTGGGT TGATCAATTG AGAATTTGAT AGCTTTGGGA	240
	TATCGGGATA GAATAGTCTA CGGTCAACTA GATCNGGTGC GAnTCCATAT TTAGTGCCAT	300
	GCAGCACGCA T	311

35

(2) INFORMATION FOR SEQ ID NO: 3086:

- 40 (1) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 271 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3086:

	ATGTAAATGA TCATCCTTCA TAATAACAAAC GATTACTGAT CTTGATCATG ATTTTGAAACA	60
	ATAACAACTG CTTTATTAAT ACCTTGTATA CGCTCGAGnC ATGCCAACCT CTGACAACTC	120
50	AATCCTAAAC CCTCGAATCT TAACTTGTIT GTCCCTTCGA TATAAATAAT CTATGTTGCC	180
	ATCGGGTAAC AACGAACGA TATCACCAC TCCCTATACAT CAGCTGATTT ATATTGAAAT	240

55

(2) INFORMATION FOR SEQ ID NO: 3087:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3087:

GTAAAGATTT CAATTCA TCTTTAAATA AACTTAATGG TAATTTGTTA TACCAAATAA 60
AGCCTTCTGG ACACCTCCCT TAGACCGACG ACCGTCCTAG CTAATGTCGA TTTCCCTGAC 120
CCTGATTACAC CGACAATGCC TAATGTTTCG CCTTTCTAA TAGCCAAGTT AATATCATAA 180
CTGCTCGGTA TGGGCTGCCCT CTCGGTGATG TGTAATCCAC GCTCCACGCG ATCGATTTTA 240
ATAAAAATATC ATGGTT 256

(2) INFORMATION FOR SEQ ID NO: 3088:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3088:

AAGGGTTATTT	GAATGATCAA	GGTATCCACA	AAAGAGGTGC	TGAAATAGAT	CGACTCGITA	60
AAGGATGTAC	AGGTGTTAAA	CGTACAACTG	GACAGCATCC	AGGGGGTATT	ATTGTAGTAC	120
CTGATTACAT	GGATATTTAT	GATTTACGC	CGATACAATA	TCCTGCCGAT	GATCAAAATT	180
CAGCATGGAT	GACGACACAT	TTGATTTCCC	TTCCCTTCAT	GATATGTATT	AAAACCTGAT	240
AAACnTGGAC	ACGTGATCCC	ACCATGATCG	ATGCCTCCAG	ATTATCAGGA	ATGATCCAAA	300
ACCATAACCTG	AGATGTAAGA	GTATCAGTAT	TAGACnC			337

(2) INFORMATION FOR SEQ ID NO: 3089:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3089:

AACATTACT TTACGCTATC AATGGTGGTA AAGATGAAAA TCTGGTGCAC AAGTTGGTCC	120
AAACTTCGAA GGTATTAACA GCGAAGTATT AGAATATGCC GAnATTCAAG AATTTGATCA	180
5 AATGATGGAT TGGCCTAGCA GGTGTTTACA TTAACTCATT AAATGTATnA CTACATGCAC	240
GATAATACAG CTATGACGAT TGAATGGATT ACATGTACAG AATTGTCCGn CCATGGCACA	300
GGA	303

10 (2) INFORMATION FOR SEQ ID NO: 3090:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3090:

CTTTCGTTAA AGGGGCATAT TCATATAATG GATGGTCATT AATAATAATT CCTGCCGCAT	60
GTGTAGATGT ATGTCCTGGT AACCTTCTA ACTTTTACA AATACTGAAAC CAGCGTTCAT	120
25 GTCGATGGTT TCGATGTACA AACTCTTTAA AATCGTCAAT TTGATATGCT TCATCAAGTG	180
TAATTCTAA TKTATGTGGG ATTAAACTTG GAAATTTCAT TAAATGTAAC TTCATCAAAC	240
CCCATAATTG TTCCAACATC TCTAGCAACT GCTCTTGCAA GCAGATGACC GAAAGTCACA	300
30 ATTCCAGATA CATGTAGCTC GCCATATTTT TCTTGGACGT ACTGAATGGA CCCTTCTCG	360
GnGTGTATCT GCAAGGTCAA TTTCAATTnT CAGGCATGGT	400

35 (2) INFORMATION FOR SEQ ID NO: 3091:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3091:

45 TTGTTTTTTC ACGTTCAATn ATTATCTTCA ACTTGTGACT ACAGATTTA AAATGGAATT	60
TACAAGTATC TTCTTCAATA TTTTGCATCA TGATATCAAA TAATTCTATGA CCTTCATTT	120
50 GATAGTCACG TAATGGATT TGTTGTGCAT AAGAACGTAAC GTGAATACCT TGACGTAATT	180
GGATCCATGT GTCGATATGG ATCAGTCCAA TGGCTATCAA TAGAACGAGG TAAAATCATA	240
CGCTCAAACC CCATCCATTG GnTCCTCTAA GATAACCTTTT GACCTTGGAT AGChGCTCAA	300

(2) INFORMATION FOR SEQ ID NO: 3092:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3092:

CGACACCTCA ATAATCATAT CGTAATGTTTC AACTTTCT GATTAAATG TAATTCATT	60
TCCATTGATA GCATTAATTCTT CCTCATTTAA ACGGTATGGA ATCTCCCGCT TATCTAATTC	120
ATCAAGTATA GGTTGATTCA GTCGGCATCC ATAATTATT TATCTTATCA GATCGATGAA	180
TAAAGTAGGG TGTAAACCAC GTTCCATAAA GATTCAGG AACTCCAATG GAACATAACC	240
TGCACCTACC ACCAATACCTT TATCCACTTG GATTGGCTTG GAGGAATGGT CGGATAGGCA	300
TCCAGGGCCT CCAAAATTCC nAGGGGAAAn GGTAATATCC ACCTTCCAAG GCCAAGGGCC	360
AATTGGCACCC TGGCCACCCCA GGGnCTTAAA AAGGGTTAA	400

25 (2) INFORMATION FOR SEQ ID NO: 3093:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3093:

TTATACCCGn CAAATTCTATA AATATAGTnC CTTTCAATA GATTGATATG TATGTCTAAA	60
TGTATCGATT AACTTGTCTA ATGCTGCTTC ATCTAATGGT CGGTCTGCTA ATTTAAAAAA	120
TGTATTCTTC AATAGGTATT CCCATATAAT GCGTTATTTC TTTAGATGAT GGTTCCGTTA	180
AGCCACATGC TTTAAATGCA CTTTGTGTTG CTACTTCACC ACATTTTTTC GTGTCTGCCA	240
ACGTACCATC AA	252

45 (2) INFORMATION FOR SEQ ID NO: 3094:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 314 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

AATCTATTAA	TAATGAAGAA	AAAATTGTAC	TAGCACGTAG	ACGGTTAATA	AAGTTCGATA	60	
AAGATATCAG	TATTCCATAT	ATTCTAAAGC	AAGCATATTTC	TAAAGAAAAA	AACAGTTATA	120	
6	TATTCTTGTG	AGAATCACAA	GATTCTATAT	TCTTTTCACA	AACACCTGnn	CAATTAATAA	180
AGGTCAATAA	TAAAATCTAT	CGACTAAAGC	TGTGCAGGTC	AATTAAACGG	TCACAAGTGA	240	
10	GGCCGAGGTA	CAAAAAATGT	TGAGCATTAA	AAAGTATAAA	CTTATCGACA	CGnTTGTGTG	300
CAGTTTCAT	GTAA					314	

(2) INFORMATION FOR SEQ ID NO: 3095:

- 15 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3095:

GGTGAGGCCG	CATTGAGAAA	AAATGCTGAA	GTAATCGAAG	CTGTATCGCA	GTCTTGTGTTG	60	
25	ACAAACAGGAT	TTTGTGTTATG	GTGCCAATTAA	GCTTTTCAA	CGTATTGAGA	AAATGCCACG	120
CAGCCACATT	TAAATAATGA	CTTACAACAG	CAATTGTTAT	CTGGAGAAAT	ATTAGGTGCT	180	
30	ACCGGATTGT	CTAACCCGA	TGAAGTCATT	TAATGGATTAA	AGAAnAAGTT	GGACCCTTG	240
AAACACCAACC	TTAATGTTGG	ATGGGACCAA	TTGGGTGGTC	CAGTGGGAnC	GTAATGCCCA	300	
GCTGTAAAGT	nATAATCCAA	GGAAAGACCC	AT			332	

35 (2) INFORMATION FOR SEQ ID NO: 3096:

- 40 (1) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 400 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3096:

45	TTTATGCATA	CGCGCACTCA	TCACACTACC	GACAACAACA	TCATCTTTC	GAGCATATCT	60
ACTTAACAAC	GTCATGACCA	CACTCATAAA	GAACATAAAA	TCAGTAATTAA	GATGCTTTTC		120
50	TACATACTTT	TGAAGTAGCT	GTCTCATTG	TTGATTGATG	TAAATGACAT	CATGCTCCAT	180
TTGTCGGTTT	AATAATTGGT	CTAACATAnT	CTGTCGGGTA	AGCCTAAAAT	AGGGTACTTC		240
ATCCTTGAAT	TGAGGATACC	CATAATTGGTC	CTAACGTTCG	GTCCATATCC	ACGGATGGCG		300

ATTTAAGGTT GGATAAAAGGT GCCGTTAAGG ATCCAATTCC

400

(2) INFORMATION FOR SEQ ID NO: 3097:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3097:

15	ACTCTGGTCC TTCTGCATAA CTGCCGTAAA TAATTACCT TCATCACACCG CTGTACCTAC	60
	CAATAATCCC nCACGATATA CGTGGAAATTG GAGGTGTACG GTAGAAATAC TTCACCAATG	120
20	ATGCACCTAC AATTTTAAAT AGATTTTAA GACCTTGTTG GTTTTGTACA ATTAATGTGA	180
	CATGACTAGG TCTTGCACGT TTATATGCAT CTTCAATTACT GAGTTTTTG GTTGATTInC	240
	GTTATGATT AATACGGCTA ATTCT	265

25 (2) INFORMATION FOR SEQ ID NO: 3098:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3098:

35	CTAATGTATC AGTTTGGCAT GAAATCTTTT GCATCTTCA ATAATIGTTG TGATCTTTT	60
	TAGTCACATC ATCAATTTTC TTATCTTCGT ATAATGCTTT TTCAATCTTA TGATATCCTG	120
	ACCATTCTTT TTCTTTTTTC TCTTCTTCA TATCTGCAAG CGGGCATCCA ATTTTAGGAT	180
40	CCTAAATCTC CCAAATGCTT CTGAACGTGGT CAGAGCGTCA TAATACATAC GACTTTGGA	240
	TATACGCTTT InCTTGGGCA TACATTATT CAATCGTTA CAAATTCTTC TGACCTTTA	300
	AAATCATTA CTGTCAnCAG A	321

45 (2) INFORMATION FOR SEQ ID NO: 3099:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

ATCCGCAATC TGAGAAACAT CATCTTCGAG TTGTTGGAGG GTTCCAATT TCAAGTCATA 60
 5 AATCAGATGA TGAATGGCGA GAGTTGGAC TAAATCATTT TGTATTACCT GAAGTTTAA 120
 TTTCAACTGA TAATAATGGG ACATTTTAA CTTATACAGT TAAAAGGGAA AGTTTACTG 180
 10 TTGAGGCATT GAACGATTAA ATGGATTGTT CAACAATATA TCGGACATAG AGTGGACGAC 240
 CAATGGGGGA ATACCAGAAT GAGATATTAT AAAACA 276

(2) INFORMATION FOR SEQ ID NO: 3100:

- (i) SEQUENCE CHARACTERISTICS:
 15 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3100:

GTCATTTGAT GACAATGGTA TTAGACCAAG TACCAACCGT TCTGTGCCAC nTAAAACGTT 60
 25 GTTAATAACT TGCCGGGCTT CACACTAAC TAAATGGCA AAGTAGGGGT GTTGTACAT 120
 GCAAnGTTAA GAACGAGCAT GTTTGATTCA GGAGATAATA AGAACTATCA AGCACAAGGA 180
 AATGTAATTG CATTAGGTCG TATACATGGA ACTGATAACGA ATGACCATGG CGATTTT 237

30 (2) INFORMATION FOR SEQ ID NO: 3101:

- (i) SEQUENCE CHARACTERISTICS:
 35 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3101:

nCGATATAAC AAGGTTGTTA GACTTAAAGG TGGCGATCCA GCGATATTG GTCTGTGCA 60
 40 AGAAGAAGTC GACATACTAA ATGAACATCA TATTGCGTTT GAAATTGTAC CAGGGTGAC 120
 ATCAGCGAGC GCnAGTTGG CTACTATGCA GACAGGTTG ACAATGCGTA CAGTTGCTAA 180
 45 AAGTGTGGAC ATTTTCTACA GGTCACTTTT AAAGATTCAAG AAGAAAATGA AGTGGATGG 240
 TCCATTCCCTT AAGT 254

50 (2) INFORMATION FOR SEQ ID NO: 3102:

- (i) SEQUENCE CHARACTERISTICS:
 55 (A) LENGTH: 240 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3102:

5	CAATCACTCA TGTAGTAATT GATACTAAG AAGTCGTTA AATCTTGGC TGCATCTAAA	60
	ATGGCATAAT CTTCATnTGT AATGTTAAT TTACCGCCAn TAACAGATAA GATATGTTGC	120
	ACACCTTCCA TCGTTTCACG AGTAATACTT ACCTAAATAT GTTGCATCTA AGATGAATT	180
10	ATTATGGATG GATATCTTCT AAATTCTGCT GCACGGGACA TCTTCAGGAT TTGGATGGTT	240

(2) INFORMATION FOR SEQ ID NO: 3103:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 328 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3103:

20	GTTGTAAACT TCAATTGTTCA AATAAAATAA CACATATCAT TGGAGGTGAA TTGATATGCC	60
25	AGATTCAATC ACAATTATAG ATGAAAACAA AGTGGTTGAT GTTGTATTAA TTGCAGGTAG	120
	AATTTTACTT GAATCAGGTG CTGAnACATA TCGAGTTGAA GATACAATGA ACCGTATCGC	180
	ACATAGTTAT GGTCTTCATA ATACATATAG TTTTGTCACT TCAACTGCAA TTATTTTTC	240
30	ATTAAACGAT CGAACAAAGTA CAAGATTAAT TCGTTACAAG AGCGTACAAC AGATTTAGGG	300
	AAAnGTGCGAA TAAGCGGGGn AATTCITC	328

(2) INFORMATION FOR SEQ ID NO: 3104:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3104:

40	TTTTGCTTTC TGCGCTAATA ATCTAATGTT CGTGGAACCG nAACCAGAGA TATTACAAAT	60
45	ACATCATCGA CTAATCGCAG GTGTCGTTGA TTCTCCAACA ACATGTGCCT GTTTGCCGAG	120
	CTGATTTAAG CGGGCATTGC AAAACTATTG GCCACGAATC CTGAACGTCC TTTGCCAGCT	180
50	ACAAATATAT GTTCAGCATG TAGTATTTG GATGCAAAGT TGAAAACCTCA TCCGCTTCAA	240
	CATGTGACAA AGTCACTTTA ATCnA	265

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 243 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3105:

ACTAGTAGAG TATCTAATGG TGATTTAAC ATTATTACTG CTGGTGTACC AACTGGTGAA	60
ACTGGAACTA CTAATATGAT GAAAATCCAC CTATTTGGTG ACGAAATTGC TAATGGTC	120
nGTATTGGAC GTGGATCAGT TGTTGGTACT ACATTATTGC TGAAACTGTT AAAGATTTAG	180
AAGGTAAGA TTTATCTGAC AAATTGATCG TTACTAACTC AATCGATGAA ACGTTTGTGA	240
CCT	243

(2) INFORMATION FOR SEQ ID NO: 3106:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3106:

CTATTGCGTT TGGGTAATC TAAAGCAGGC GTAnATTATC AAAGTTTGGG ATATGCAACC	60
AGCACACTTA TTCTTTATGA TTGCAGCGCC AGAAGTGGnG CCCAAACACA TCTAGATGCT	120
TTACTAAGTT GTCTGGTATT TTAATGGATG AAAATGTACG TGAGAAAATTA TTACATGCTT	180
CATCACCTGG AAGAACGTACT AGCGATCATATA GATGAGGCTG GATGATGAAG TGGA	234

(2) INFORMATION FOR SEQ ID NO: 3107:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 227 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3107:

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TTTGTGAAAGCG GCATAATCAT GAAGAATAGG ACTAGGATTA TAACCTTGTA CAGATGATGT   60
CGTTGTAATT GACCGCACCCG GTTTTAAATA TTCCAATGAC TTTTTGAACT GTCCAAAATA 120
GCGGnTAGAn ATTCGTTCTA AATGTTCTG TAAATGCCTC AGTTGTAAT CCATGAATAT 180

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(2) INFORMATION FOR SEQ ID NO: 3108:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 257 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3108:

CTTTAAGTTA CGTCGGCTT TGATTAAAGT AAAACGTGGT ACTGTTTCCT ATGACAAGAG	60
TCTAATTGGA TACAATGTAA ACAAAATGGT GnATTGTAT TATAGATAAT AAACATTGn	120
TATACATTCA ACATATCGAT GACCACTTGG ATTAAGCAAC GTAATATCAT TCGTACTGCT	180
CAAGAAATGA CAAACGAAAT ACGGAGAAAAT TTTGAGTCAT ACACGTCAATT TAGAATGAAT	240
20 AGTATTATGC AAGTACT	257

(2) INFORMATION FOR SEQ ID NO: 3109:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3109:

CTTAAAGCCA AGTCGATCTG CTAATTTGCA AAGTGTCACT GAATCTTGCA ATGCCCTTTG	60
TGCATCCTTA CCTTCATCTA TTAAGGCATA GTCTAACACG CTTAATTAA CCAATCCGTC	120
35 ATCTCCAAAC TTATCCTGTC ATGTCAAACC GACATAACAT TTGTAGCGTT CTTAACACCA	180
TTCCCTCTGC ATATAACCCAC GTATATGATA ACGTnTTCA nTTAACT	227

40 (2) INFORMATION FOR SEQ ID NO: 3110:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3110:

50 TTTCTTCATC GTTTGTGAGA AAGAGGTATT TTTAATTGGG AAAnCAGGTA AAAAGGATGG	60
AAGTACATAA AAAGAGCAAT GCTTGGGCAT TATTCCnCTT GTTATTATTT GTGGCGTTGT	120

GATAACGTAA TTGTGCGTTA TTAATGAATC GAAAAGAACATC ATTGCTAAAA AGTGAGTCTC	240
CGAAAGGCAGG CCTTCAACTG TTAAGAGTGA TTTATTGCAG GCTTCATCG CGAAATGGTG	300
CnAAGCGCGT ATTAGCACTA GCCGAA	326

(2) INFORMATION FOR SEQ ID NO: 3111:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 300 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3111:

CTACGGGCC TTGCGATCTTT CCCAACAAATT AACCCCAACT CTATTAGCAC AGATTATCA	60
ATTGATTTCAT AAGCTTCATC AAAGGGTGAA CTAACATGCA TTAACGCTTC TTTAATATCA	120
ATTAAGTCGG CATGTTCAAC ACCAATTTTC CCTTTTTAT TTTAGCTTT TTCTCTATCA	180
ATATACGCAT GTTTAACACC TTTGACATGT TCAGTAAATT GTGACTTCCT nAATTTTTA	240
25 TCCTCCCTTG GTGnnGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGGG GGGGGGGGG	300

(2) INFORMATION FOR SEQ ID NO: 3112:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3112:

TTATTGTTAA CACAAGGnTT CGAACAAAGGT TGGTTAGTA CATTTCAT CATTGTCTG	60
AGCATTTCATC TCATCACTAC GTTGATATTTC ATCATCATCG AACGTCGACA TGAAGTACCT	120
40 TTTATTGATT TCTCAGTATT ACGCAACCGT CCGTTCATGG GTGCATTTAAATAACTTT	180
GTGTTAAATA GCGGTCTAGC GTAACAGGGT CTTTCATATA TGCTCAACAC ACCTGGTTA	240
45 TCGCGCGCAA TCGGACTGTT ACATGCCAAT GCCATGGCG TTCGAGATCG TTAGTGAAG	300
CACATAGTTG GGGCAATGAG CCACATGGTC GTGTCCGTCA CGCACACATA TAGCAGCT	358

(2) INFORMATION FOR SEQ ID NO: 3113:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3113:

5	TCGGTCTTGA AAACCGACAG GGGACTTAAC GGCTCGCGGG GGTTCGAATC CCTCTTCCTC	60
	CGCCATCAAT ATTTATATTA AATTCTATAT ATAATGAAGG TAAGTGCTCA AATTTTGAGT	120
	ATTTACCTT TTTATTTGTC TTTGAATGGC TCGTAATTTC TGATAATAGA AATGATAAGG	180
10	CATTGAGATT GGAAGGGCAT TTGGCTTGTG CAAnATACAT AGChAAATGT CGTTGTTGTT	240
	TTGTGATAGA T	251

(2) INFORMATION FOR SEQ ID NO: 3114:

- 15 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 6591 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3114:

20	TTAAAGTGAA TTnCTTGGG TTACAGAAWT TTCAACAACT TAAAGCACG TATAATGATG	60
25	ATTTTCAGCT TGTACAAAGG AGAAAAAAAG AAGACAAACCA AGCCAATAA TGGACTGCC	120
	GCCTAATAAT AAAAACTCTA AAAGTTGTAT TTTAAAATA GTTCTTTAAA TTATATACCC	180
30	ACCACATTTG GTGGAGAACC GTAAACAAT GCATAGTTGC TTAACCTCCA ATATTGAACT	240
	CATCATTACA ATTTGACATA GAGTCTATTAA AAGCGTGTGC CATTGAGTC CACTTTTATT	300
	TGTATTGTAT AGAGAGAAAT AAAAGAAC CTTGTTTAC AAGGTTCTA ATACGTTATG	360
35	TTATGAAAT AACAGTTAAT TATACCGGTG GTCGGGGTCG AACCGACACT CCACAAGTGG	420
	AACGgGATT TGAGTCCCGC GCGTCTGCCA ATTCCGCCAC ACCGGCTTAA TGGTAAACAA	480
	AAAACCTCCC TTTGGAAGCA ATTATGGAGC GGAAGATAGG ATTTACACCT ATACCTCGTT	540
40	CCGGGAAGGA ACGTGTTCTA AAAGTTGAAC TACTCCCGCA AATATTAAT TATGGAGCGG	600
	AAGATAGGAT TTACACCTAT ACCTCATTCC AGGAAGGAAT GTATTCTAAG AGTTGAAATA	660
	CTCCCGCATT ATTATTAAT TATGGAGCGG AAGATAGGAT TTGCACCTAT ACCTCGTTCC	720
45	GGGAAGGAAC GTGTTCTAAA AGTTGAACTA CTCCCGCATA AACCTGGAGG CGGCAACCGG	780
	ATTTGAACCG GTGATAAAGG TTTTGCAGAC CTCTGCCTTA CCACCTGGCT ATGCCGCCAA	840
	TAACCTGGGCT AGCTGGATTG GAACCAACGA GTGACGGAGT CAAAGTCCGT TGCCTTACCG	900
50	CTTGGCTATA GCCCATTAAAT AATAAGGGCG GCTGAAGGGG ATCGAACCT CGAATGTCGG	960

	CGAACCCACA CCAAAGGTTT TGGAGACCTC TATTCTACCG TTGAACATATG CCCCTATTAA	1080
	AAATAATAAA TGGAGGGGGG CAGATTGAA CTGCCGAACC CGAAgGAGCG GATTTACAGT	1140
5	CCGCGCGTT TAGCCACTTC GCTACCCCTC CATAAATGGT GCCGGCCAGA GGACTTGAAC	1200
	CCCCAACCTA CTGATTACAA GTCAGTTGCT CTACCAATTG AGCTAGGCCG GCTAAGAAAT	1260
10	GGTTCAAGGAC AGAGTCGAAC TGCCGACACA TGGAGCTTCA ATCCATTGCT CTACCAACTG	1320
	AGCTACTGAA CCATAATAAA AATGTAATGA TGGCGGTCTC GACGGGAATC GAACCCGCGA	1380
	TCTCCTGCGT GACAGGCAGG CGTGTAAACC GCTACACTAC GAGACCTATA AAATATTGCG	1440
15	GGAGGCGGAT TTGAACCACC GACCTTCGGG TTATGAGCCC GACGAGCTAC CGAACTGCTC	1500
	CATCCCGCGA TAATAAAAAA TAATGGCGGA GGAAGAGGGA TTCGAACCCC CGCGGCCCCGT	1560
	TAAGGCCCCG TCGGTTTCA AGACCGATCC CTTCAGCCGG ACTTGGGTAT TCCTCCATTA	1620
20	TTATAGGTAA ATCGCTATTA ATTATAAAAT TAAATGGCGG TCTCGACGGG AATCGAACCC	1680
	GCGATCTCCT GCGTGACAGG CAGGCGTGT AACCGCTACA CTACGAGACC ATTAGTAAA	1740
	CGGAGGAAGA GGGATTGAA CCCCCCGCGAG CCGTTAAGCC CCTGTCGGTT TTCAAGACCG	1800
25	ATCCCTTCAG CCGGACTTGG GTATTCTCC AAAATTATAT GGaCtTGCAG GACTCGAAC	1860
	TGCGACCGAA CGGTTATGAG CCGTTAGCTC TAACCAACTG AGCTAAAGGT CCTAAATATA	1920
	ATTTTACAAC TAATAAAATAG TGGCGGTGGA GGGGATCGAA CCCCCGACCT CACGGGTATG	1980
30	AACCGTACGC TCTAGCCAGC TGAGCTACAC CGCCTTATAT AGTTTGTAAA TAATATGGTG	2040
	GAGACTAGCG GGATCGAACC GCTGACCTCC TGCCTGCAAA GCAGGCGCTC TCCCAGCTGA	2100
35	GCTAAGCCCC CATAATAATT ACAGTATATC GGGAAAGACAG GATTGAAACC TGCGACCCCT	2160
	TGGTCCCAAA CCAAGTGCTC TACCAAGCTG AGCTACTTCC CGTATAATTAA ACGCGCCCCGA	2220
	TAGGAGTCGA ACCCATAACC TCTTGATCCG TAGTCAAACG CTCTATCCAA TTGAGCTACG	2280
40	GGCGCATATG TTTTATTGA AAATGGTGCC GAGGACCGGA ATCGAACCGG TACGgtTGATC	2340
	ACTCACCGCA GGATTTAAG TCCTGTGCGT CTGCCAGTTC CGCCACCCCCG GCACTATAAA	2400
	AATGGAGCAG AAGACGGGAT TCGAACCCGC GACCCCAACC TTGGCAAGGT TGTATTCTAC	2460
45	CGCTGAACTA CTTCTGCATA TGCAGGTGAA GGGAGTCGAA CCCCCACgCC GTAAGGCGCT	2520
	aGATCCTAAG TCTAGTGCGT CTGCCAATTG CGCCACACCC GCAAATGGTG AGCCATAGAG	2580
	GATTGAAACC TCTGACCCCTC TGATTAAAAG TCAGATGCTC TACCAACTGA GCTAATGGCT	2640
50	CTTCCATGGT GCCGGCCAGA GGACTTGAAC CCCCCAACCTA CTGATTACAA GTCAGTTGCT	2700
	CTACCAATTG AGCTAGGCCG GCAATATGTA AGAATAAAATG GTGGAGAATG ACGGGTTCGA	2760

	AAACTGCCCTG GCAACGGTCT ACTCTAGCGG AACGTAAGTT CGACTACCAT CGACGCTAAG	2880
	GAGCTTAACT TCTGTGTTCG GCATGGGAAC AGGTGTGACC TCCTTGCTAT AGTCACCAGA	2940
5	CATATGAATG TAATTTATAC ATTCAAAACT AGATAGTAAG TAAAAGtGnA TTTTgctCGC	3000
	AAAACATTa TTTGATTAA GTCTTCGATC GATTAGTATT CGTCAGCTCC acATGTCACC	3060
10	ATGCTTCCAC CTCGAACCTA TTAACCTCAT CATCTTGAG GGATCTTATA ACCGAAGTTG	3120
	GGAAATCTCA TCTTGAGGGG GGCTTCATGC TTnAgGATtT TCAGCACTTA TCCCCTCAC	3180
	ACATAGCTAC CCAGCTTATG CnTTGGCACG ACAACTGGTA CACCAGAGGT ATGTCCATCC	3240
15	CGGTCCCTCTC GTACTAAGGA CAGCTCCTCT CAAATTCCT ACGCCACGA CGGATAGGGA	3300
	CCGAACCTTcT aCGACGTTCT GAACCCAGnC sTGTACCGCT TTaATGGGCG AACAGCCAA	3360
	CCCTTGGGAC CGACTACAGC CCCAGGATGC GATGAGCCGA CATCGAGGTG CCAAACCTCC	3420
20	CCGTCGATGT GAACTCTTGG GGGAGATAAG CCTGTTATCC CCGGGGTAGC TTTTATCCGT	3480
	TGAGCGATGG CCCTTCCATG CGGAACCACC GGATCACTAA GTCCGTCTTT CGACCCCTGCT	3540
	CGACTTGTAG GTCTCGCAGT CAAGCTCCCT TATGCCTTTA CACTCTATGA ATGATTTCCA	3600
25	ACCATTCTGA GGGAACCTTT GAGCGCCTCC GTTACCTTT AGGAGGGCAG CGCCCCAGTC	3660
	AAACTGCCCG CCTGACACTG TCTCCCacCA CGATAAGTGG TGCGGGTTAG AAAGCCAACA	3720
	CAGCTAGGGT AGTATCCCAC CAGCGCCTCC ACGTAAGcTA GCGCTCACGT TTCAAAGGCT	3780
30	CCTACCTATC CTGTACAAGC TGTGCCGAAT TTCAATATCA GGCTACAGTA AAGCTCCACG	3840
	GGGTCTTCC GTCCTGTCGC GGGTAACCTG CATCTTCACA GGTACTATGA TTTCACCGAG	3900
35	TCTCTCGTIG AGACAGTGCC CAAATCGTTA CGCCTTCGT GCGGGTCGA ACTTACCCGA	3960
	CAAGGAATTt CGCTACCTTA GGACCGTTAT AGTTACGGCC GCCGTTTACT GGGGCTTCGA	4020
	TTCGTAGCTT CGCAGAAnc ArCcACTCCT CTTAACCTTC CAGCACCGGG CAGGCGTCAG	4080
40	CCCTATACAT CACCTTACGG TTTAGCAGAG ACCTGTGTTT TTGATAAAACA GTCGCTTGGG	4140
	CCTATTCACT GCGGCTCTTC TGGGCGTTAA CCCTAAAGAG CACCCCTTCT CCCGAAGTTA	4200
	CGGGGTCACTT TTGCCGAGTT CCTTAACGAG AGTCGCTCG CTCACCTTAG AATTCTCATC	4260
45	TTGACTACCT GTGTGGTTT GCGGTACGGG CACCTAIIITT CTATCTAGAG GCTTTCTCG	4320
	GCAGTGTGAA ATCAACGACT CGAAGACACA ATGTCTTCTC CCCATCACAG CTCAGCCITA	4380
	ACGAGTACCG GATTTGCCTA ATACTCAGCC TTACTGCTTA GACGTGCAAT CCAATCGCAC	4440
50	GCTTCGCCTA TCCTACTGCG TCCCCCCATC GATTAAAACG ATTATAGGTG GTACAGGAAT	4500
	ATCAACCTGT TATCCATCGC CTACGCCTGT CGGCCTCAGC TTAGGACCCG ACTAACCCAG	4560

	TTCGCTACTC ACACCGGCAT TCTCACTTCT AAGCGCTCCA CATGTCTTA CGATCATGCT	4680
	TCAACGCCCT TAGAACGCTC TCCTACCATT GTCCAAAGGA CAATCACAG CTTCGGTAAT	4740
5	ATGTTTAGCC CCGGTACATT TTCGGCGCAG TGTCACTCGA CTAGTGAGCT ATTACGCACT	4800
	CTTTAAATGA TGGCTGCTTC TAAGCCAACA TCCTAGTTGT CTGGGCAACG CCACATCCTT	4860
10	TTCCACTTAA CATATATTTT GGGACCTTAG CTGGTGGTCT GGGCTGTTTC CCTTTCGAAC	4920
	ACGGACCTTA TCACCCATGT TCTGACTCCC AAGTTAAATT AATTGGCATT CGGAGTTTGT	4980
	CTGAATTCCG TAACCCGAGA GGGGCCCCTC GTCCAAACAG TGCTCTACCT CCAATAATCA	5040
15	TCACTTGAGG CTAGCCCTAA AGCTATTCG GAGAGAACCA GCTATYTCGA GGTCGATTG	5100
	GAATTTCTCC GCTACCCCTCA GTTCATCCGC TCACCTTCA ACGTAAGTCG GTTCGGTCTT	5160
	CCATTCACTG TTACCTGAAC TTCAACCTGA CCAAGGGTAG ATCACCTGGT TTGGGTCTA	5220
20	CGACCAAATA CTAAACGCC TATTCAAGACT CGCTTTCGCT ACGGCTCCAC ATTTACTGCT	5280
	TAACCTTGCA TCAAATCGTA ACTCGCCGGT TCATTCTACA AAAGGCACCGC CATCACCCAT	5340
	TAACGGGCTC TGACTACTTG TAAGCACACG GTTTCAGGTT CTATTCACT CCCCTCCGG	5400
25	GGTGCTTTTC ACCTTCCCT CACGGTACTG GTTCACTATC GGTCACTAGA GAGTATTTAG	5460
	CCTTAGGAGA TGGTCCTCCC AGATTCCGAC GGAATTTCAC GTGCTCCGTC GTACTCAGGA	5520
	TCCACTCAAG AGAGACAACA TTTTCGACTA CAGGATTATT ACCTTCTTGT ATTCACTTT	5580
30	CCAGATGATT CGTCTAATGT CGTCCTTGT AACTCCGTAT AGAGTGTCTT ACAACCCAA	5640
	CAAGCAAGCT TGTTGGTTTG GGCTCTTCCC GTTCGCTCG CCGCTACTAA GGGAAATCGAA	5700
35	TTTTCTTCT CTTCTCCGG GTACTAAGAT GTTCAGTTC TCCGGGTGTG CCTTCTGATA	5760
	TGCTATGTAT TCACATATCG ATAACATGAC ATAACATCATG CTGGGTTTCC CCATTCCGAA	5820
	ATCTCTGGAT CAAAGCTTAC TTACAGCTCC CCAAAGCATA TCGTCGTTAG TAACGTCCTT	5880
40	CATCGGCTTC TAGTGCCAAG GCATCCACCG TGCCTCTTA ATAACCTTAAAT CTATGTTCC	5940
	ATCCTACAGG AAACCGCTTA TTAATCTTGT gaGTGTTCTT TCGAACACTA GCGATTATTT	6000
	CTTATGAAATT CAAGCTTATT TAAAACCTTT TATTCACTCG GTTTTGCTTG GTAAAATCTA	6060
45	TATTTTACTT ACTTATCTAG TTTTCATGT ACAATTTCTT TTTAGTCAAG CGCTCGCATA	6120
	AGCAATATCA CTTTAACCAA AAAATATTIG AATGTTAAAT AAACATTCAA AACTGAATAC	6180
	AATATGTCAC ATTATTCCGC ATCTTCTGAA GAAGATGTTG CGAATATATC CTTAGAAAGG	6240
50	AGGTGATCCA GCCGCACCTT CCGATACGGC TACCTTGTAA CGACTTCACC CCAATCATTT	6300
	GTCCCACCTT CGACGGCTAG CTCCTAAAAG GTTACTCCAC CGGCTTCGGG TGTTACAAAC	6360

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ATCTACGATT ACTAGCGATT CCAGCTTCAT GTAGTCGAGT TGCAGACTAC AATCCGAAC	6480
GAGAACAACT TTATGGGATT TGCTTGaCCT CGC _g GGTTCG cTKGCCTTG TAATGTCCAA	6540
TGTAGCACGT GTGTAGCCAA ATCCATAAGG GGCATTATGA TTTGACGCAT C	6591

5 (2) INFORMATION FOR SEQ ID NO: 3115:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3115:

GGTGCCAAGC AATAAAATATG ACTATGCTCA AACTGAATTa ATGGTGGGTG TGTGCCATC	60
GTAATTGGAT CGTCTGAAGG CGCATATAAA TGATAGTGCT CTTCGAATAA AGGTAGCATA	120
TGTAATTGTT TGTGTTTACG TATTTCTGGT GTAAGTTCCG TGAAACCAAAT GTCTATATTc	180
CCATTAATAC GCTATTATAA TGTGTCAGGT CCAATAAGCC CCGGATGACA TGTGTATCCA	240
25 TTTGGAAATG GAACCGTTGG GAAAGTGGGA ATAACATGGG GGAACGTCAn TCCCCnCCAA	300
GCCCCATnGAG GTACCTTTAA TTTTA	325

30 (2) INFORMATION FOR SEQ ID NO: 3116:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 211 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3116:

40 CCGnTTGAGT TCGGTGGCGA CATGATTGAT TTTGTAAGTA AGTATGATGC AACATGGGCT	60
GnTTTACCTA CTAAATTGGA GGCGGGTACT CCATTAATTG CTCAAGCATT GGGCTTGTCA	120
GAAGCTATTC GCTATTTAGA ACGCATAGGT TTTGATGCAA TTCATAAAATA TGAACAAGAA	180
45 TTAACGATAT ATGCTTATGA GCAAATGTCT G	211

(2) INFORMATION FOR SEQ ID NO: 3117:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 210 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3117:

AACGTnTTT GAAATGATTG CGCGATGTT GGCGACAGTT AAAGTAGGTG GCATCTTATA	60
TACCTATCGA TATTGATTTT CGAATAAAC GACAAGGTGC AATTTGGAG GATGCTAAAG	120
TAAC TGCA GT CATGCTTAC GGCGTTGnAA TTGAAACGAC ATTACCAGTC ATTCAATTGG	180
AAAATGCTAA AGGCTTTGTT GAATCAAAGG	210

(2) INFORMATION FOR SEQ ID NO: 3118:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 225 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3118:

TTAATTGATC CTAGCTTGGT TTGCCTCTGT CACTTTATCA TTGATATTTT GGACAGTTGG	60
GTTGCCATTC AACACTTGAT TAATTTCACT TAACTTTGAA CGCGCTGCTT GTAATTTTG	120
GGTGTACGCA TTTAACGAAC GGnCGTCATA CCTGTTGTAT CCGTTGGTTG ATTAATGCTT	180
GTTCTAAATT GCGTTCCAA GTTThAAGCG GCGCTTATCT GGTGT	225

(2) INFORMATION FOR SEQ ID NO: 3119:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3119:

CCAACATGAT GCTAGTTGAA TTAAGTTCT TCTAAACAGA CTTCAAACGG CATGGTTAG	60
CATATCCTAT TAAGGTTGAA TCGCGTTAAC AGCACATAGG AAATGCTGTT AGGGGATGCA	120
GAGTGCGATT AGGCAGCTAC TGGAAAATTA TTGTTTGATT TGCCAGTTAT TATAAACTGT	180
45 GTGTGTTGAT GnCGAnCACA ACCCCTCCGA ACACGCTTAA TG	222

(2) INFORMATION FOR SEQ ID NO: 3120:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3120:

5	CGGCGATTAT ATTAAAAAGC CAATTACAGA ATGTAGTGGT AATGAAATAT GCCAAGAATG	60
	GCTGTATCAC TTAGGTGTAT CAACTGACAA AATTGAAGAC TTAGCAAAAC ATGCATCTAA	120
	TACGATTCCCT GTTTATATGC CATATATCAC ATCTTATTC ATGGACGCGT GCTATCGCG	180
10	nACAGACCTT TTAGTCGTGC CGGGCATGCA ATCTnCAGGA ACTTAGGCAT TTATTGGTGA	240
	ACTTTG	246

(2) INFORMATION FOR SEQ ID NO: 3121:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3121:	
	CAAATACCTT CTCAACnTTG TACTTTTG CTAATTGAGC TGCACGAATT GCTGCAACGT	60
25	ATCCACCAGG ACCTGCTCCG ATTACTATAG aTCTGTTCA ATTGGAAAT CTCCAACtAC	120
	CATGTTTAC CCCTCCATTA ATAATAATTc TGGATTATTT AATAAACGTT TAATGTGATT	180
30	CATTGCATTT TGGCCAGTTG CACCATCAAT TTGTCTGTGG TCAAAGCTTA ATGAkrtGct	240
	AATACTGGTG CTGCAACAAT TTCTCCATCT TTAACGATAG GTTTTGAGC AATACGGCCA	300
	ATTCCTAAGA TTGCTACTTC TGGGGTGATT GATAACTGGA GTGAACCATT GTCCACCAGC	360
35	TGAACCGATA TTACTGATTG TGCATnnGCA CCTTnCATT	399

(2) INFORMATION FOR SEQ ID NO: 3122:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 301 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3122:	
	CAGACAAACC TTGAATTATT CTACCTATAA TTAAAAATGC TGGCAAAGGT GTAATGATGA	60
50	TGAGTAATGA ACCTACAACA TTTAATATCA ATCCTACATA AGTAATTTG ACGCGACCAA	120
	ATTTATCAGC AACATCACCA GCACCTACGT AAACCAACCA GCCAATAAGG CAGATAAGCT	180
	AACAGCGTAT TATCGTTCCC ACGTCACTAC TATATGTGGA TGTATGGGAC ACAGTTTACC	240

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(2) INFORMATION FOR SEQ ID NO: 3123:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 378 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3123:

15	GGAGCAAATT TATCATCTGC AACTAGACAC AACATCACTG TTATTAGTAC CGGGTTATAT	60
	AGTAGCAGTC ATTGTTGGTG CACTAAGTGG TAAAATCGGC GAATATCTGA ATTCAAAACC	120
	AGCGATTATC ACAGCAATTA TTTAATAGCA CTGAGCTTGA TTTACCTGCA TTGCAGTAGG	180
20	TAATCACATT CAATCTCGTC ATTCTATGAT ATCTTGCAGT AGCTTGCCTTA ATGATGCACT	240
	TACTACGAGC ATAAACATGT CTATATGCAG GTGCATGTTA TATTATATAT GGCGACGAGA	300
	TCGThGGCCn ACGTTAACTA ATTChGCATG TCTAGCCTCG AATTATATAG TAGGAGCGTA	360
25	GTACGCCAAC TGCCACGA	378

(2) INFORMATION FOR SEQ ID NO: 3124:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3124:

40	TATTGCAAGA AATGAACCTGC TGATTTTAT AGTTTTAGTG GTCATAAAAT GCTTGGACCA	60
	ACAGGTATTG GCGTATTATT TGGTAAACGT GAGTTACTAC AAAAAATGGA ACCGATTGAG	120
	TTCGGTGGCG ACATGATTGA TTTTGTAAGT AAGTATGATG CAACATGGGn CTGATTACC	180
	TACTAAATTT GCAGGTCGGG TTACTCCCCT TGAATTGGCT CCAAGCCAAT TGGGGCTTGG	240
45	CnAGGAAGCC T	251

(2) INFORMATION FOR SEQ ID NO: 3125:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

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(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3125:

CGGTTAAGTA ATACAGGATG TTCTCTAAATT ACCTCTTCCA ATACGTCCC AACTTCATCA	60
5 TCCATACGTT CGATTTACT CTCGCATTT TTAATGTTAG TTGCAATTTC ACGTGAACT	120
AATTCTTTCA TTACGAATGG TTTAAATAGT TCAAGTGCCA TTTCTTTGG TAAACCACAT	180
TGGTACCAATT TCCANGCTTG GACCChACGG CAATTACCTG AACGGTCCCCG GAA	233

10 (2) INFORMATION FOR SEQ ID NO: 3126:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3126:

AATAGATTCC CGGGATTCAA AAGCATGGAT GTTGTACCTT GTTGTnCTCC ATTGGCAATG	60
TAATACCTGA TGTCAAGATG AATTATCCAT CACTTTGTTG ACGTGCTTTA TTTTACAGCA	120
25 TCAATTGAT CCAATCGAAA TACCAAGATAA CTTAGACTGT GTCCCAGTAA AATAACGATC	180
AATCACATCA TGAGACAAGC CAATCGCTTC AAATATTTGT GCCCCTTGAT AACTTTGCAC	240
TGTCGAAATT CCCATCTTAG CCATTACTTT AATGACACCT TCTGACAATA CATCCGTATA	300
TGTCTAACCA TTATCGACAA CGGTGCCTTG TAACCCCTCT GTCAATGTCA GTTGTCAAC	360
TGTACGTTGC GCTAGGTATG GCACAATTGa TTGGGCCAT ATGCGAGTAA ACA	413

35 (2) INFORMATION FOR SEQ ID NO: 3127:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3127:

GTGTAATAAATA CTGAACAAAA ATCACGGCAT ACTGTGAAA TTTnTGAAGA AGCTCAAAAA	60
CTATTACAAG CACATCATGC GATTGTAGAA GGATATATCG AATCAGCTTT AGAGCGTGCG	120
50 TATATCATCT TCTACATACA TAGGTAATT TATGGCGATT CCTCATGGAG CATCCTGTAA	180
AAAGTTTAC AATCACATGT GCTTATT	209

55 (2) INFORMATION FOR SEQ ID NO: 3128:

- 5
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3128:

10	TAAATTAATG GAGTTGGTA CACGTCGTG CAAGAAATTG ATGCAGTGGG GCGCTAGAGC	60
	TGCTTACATC GGGGGCTTG ATTCTACAAG TAATGTTAGG GCGGGGAAAT TATTGGTAT	120
15	ACCTGTGTCT GGTACACATG CACATGCATT TGTCCAAACT TATGGAGACC AATATGTTG	180
	CCTTChAAAA ATATGCTGAA AGnC	204

(2) INFORMATION FOR SEQ ID NO: 3129:

- 20
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3129:	
	GAAATACCAT TAATATAATA GTCGGTAAAT TAAGAACGT GGTGCGCGAT TCACAAACAGA	60
30	AATCTTAACT TATCGAAGTA TCCCTGTTTC TCTGCAACAC CAATACCAAT CATCACTGCT	120
	AGTACTAAGC CTAATGCGGG AACTCTGAGA AATTTTAAT CGTATTCTTC TTATCATCGT	180
	AAATCCATCT GGCTATTATA TTTAATATA AnGGTTTGAG CTACCGGATG CTAACGnAC	239

(2) INFORMATION FOR SEQ ID NO: 3130:

- 35
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

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	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3130:	
	ATCACAAATAA ACATTTAAA ATTCTTGTTA TCATAATCAT TAAAAGGTAT TAACCTTAAT	60
	AATATATTCT CTnGTCTCAA CCTTAATCGT ATACTTCAGA CGTCTGTTTG TAGACAATAA	120
50	AGTCATTAC GTCTTCATAT GTCATCAnAT GTTTATCATG ATATGATGAT ATATAATCGG	180
	TATATACTGT AGATATTACA CATAAGAGAG GATATAATAT GAAAAGGTCA TTAAGATGTG	240
	CTGAGAGCTG TGTATCAGT	259

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- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3131:

TGTGCCTGCC	ATTTGCAAT	ATCTTCATCT	TCACGTGGTA	ATGCACAAAAA	ATGTTTACCA	60
TGTGCATTCA	CAACTTCAAA	AATATGTTGA	CATGTGATGT	TACTTGATCA	TCACGCGTTG	120
CCATGGTATG	CAAGTGCTGC	GATAAATCTG	CGGCACCTTC	GACTATCATG	CTAACCTTCG	180
CTTGTnnATA	TCGCAATGGC	ATACCCCTTC	AACATCTTCT	ATCATGG		227

20 (2) INFORMATION FOR SEQ ID NO: 3132:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3132:

ATCGCAGTGA	TGThATCATC	TGCTGCTGTA	GCnTAGCAGG	TTCAATTCA	TTTATCGGAT	60
TAATGGGTCC	GCATATTGCC	AAACGTATCG	TTGGACCACG	TCACCGATG	TATTAACCAA	120
TTGCCATTTT	AGTAGGGGCA	TGTATACTTG	TAATAGCTGA	TACAATTGGC	CAAAATTGTA	180
TTACAACCAAG	GTGGGGTTCC	AGC				203

35 (2) INFORMATION FOR SEQ ID NO: 3133:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 201 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3133:

AGCATTAGT	TTAGCGGCAG	TAGCTGCAGA	TGCACCGGTA	GCTGGCACAG	ATATTACGAA	60
TCAnTTGACG	AATGTCACAG	TTGGTATTGA	CTCTGGTACG	ACTGTGTATC	CGGACCAAGC	120
AGGTTATGTC	AAACTGAATT	ATGGTTTCh	AGTGCTAATT	CTGCTGTTAA	GGTGACACAT	180
TCAAAATACT	GTACCTAAGG	A				201

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 207 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3134:

CATTTGTAAC TGTTATTGTT TATAACTTCT GTGTGAAGCG CAATATTACA ATTAAAATGC	60
CGAAAGAGGT ACCGnCGAAT ATTCACAAG TATTTAGGAC TTAATTCCAT TTTCAGCGGT	120
AATCATCATT CTTTATGCAT TAGGATTnG TCAATCGCAA CCAGCTTTAA ATCAAAATGT	180
AGCGGAGGTA TTTTAAAATT ATTGGT	207

(2) INFORMATION FOR SEQ ID NO: 3135:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 203 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3135:

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AACACCTTA CGTCGTGCAG GTCAACCTGT TGAGTTATGT GGTACTTATG TGCTATTAGC 60
GTCAGAAGGA ATCAAGTTAT ACAACCGGAC AAGTnTTCGG TGTTAGCGGT GGAGTGCAAn 120
TAGGTTAGGT TTGTATGAGC TTTTAATTGA GCACCATAAT GTTAATTAG TTACTTCAAT 180
CCATTAATT AAATGAATTG GTG 203

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(2) INFORMATION FOR SEQ ID NO: 3136:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 211 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3136:

CACATCCAAT GCANTCTACT AAATCAGACA CACCACAATC TCCAACCATA AnACAAGCAC 60
 AACAGATAT GACTCCTAAA TATGAGGTTT AAGAGCGTAT TATACAAAAC CGAGTTTGAA 120
 ATTTGAAAGC AGTTGGATT TATGCTCAAA CCATGGACGA CGGTTAGGTT TATGATGTTA 180
 TTCCAATAGG TTCACTATAA ATAGCTTAGT T 211

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: lin ar

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3137:

ATGGGAAAT GTTCCCCAC CACCTACAAT TTGTGAATAC AAACAATAAG TATTGCAATG	60
GACTTTACCT GGGCTTACCA AGTGAATGTA TACGTACGT ATGATACGAT TGTAGTTGnA	120
AAATAATGCG AACAGAAAAT CGTTATAAGT ACAAATAATA CAGGTGACTC AACTCCTGCT	180
TTTAGATTAA CAAATCTCCA ACCGATACAA TGAGTGCTTG CAACATACCA AGCATTATAA	240
AGAACCTGC CTTACCTAAG	260

20 (2) INFORMATION FOR SEQ ID NO: 3138:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3138:

CATAAGCAAT TAATGACTTC GTTAATTGCG AAAGTGTATC TTTTGATTA TCATTGGCTT	60
TTGCATCTTC AAGCTTCTC ACATCTGATT TGACAGCATT ACTTTCACTA TTATCTTCAA	120
GGCATAATTCTT CTAACTGCA CTTACCACIT GCTCAATTGC TTCTGChTAT TGTCAATTGCA	180
TATCGGAGTA GTAGGAAGTG CnGAATTGG CA	212

35 (2) INFORMATION FOR SEQ ID NO: 3139:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 373 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3139:

TATGGTTTT TATGCGAATA TGGATAATAA AAGGTCTCAC GACATCATTG ATAAATCGCT	60
TGAnATGTTG CGACGCTTAG ATCACAGGGG CGGGGCGGC GCAGATGGCA TCACTGGTGA	120
TGGCGCAGGT ATTATGACTG AAATACCTTT TGCATTTTC AAACAAACATG TAACGGAGGA	180

GCACCTGTTA GAAAAGAAGG GAAATTACCT CGTGAAGTCA TTCGTTATGA GTATGACCTA	300
GAATATGGTA CAAATGTTTT AACAAATGGCA CAAAGATGCA ATTGAAACCA GGTnCAACGT	360
5 GTGTTAnTAC AGG	373

(2) INFORMATION FOR SEQ ID NO: 3140:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3140:

AGCCTTATAA TAAAGTGCCT TTCATAGCAA TAAGTTGTGT CCATTGACCT ATTACATTT	60
20 TCGTTTGTA CATTAAATAT AAGAAATACG GTGCACCAAT AATTGCTACG ACAATACCTG	120
CTGGAACCCC CACCTGGTTG TAATACCATT TTGGCCATTT GTATCAGCTA TAACCAAGTA	180
ACCrTGCCCC AACTAAAATG GCATTGGGTAA AACCCACnTG	220

25 (2) INFORMATION FOR SEQ ID NO: 3141:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 177 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3141:

GAGGAGCAGC ACAACCAAAT ACACAACCAAG CTGGACAAGG TGATCAAGCT GATCCGAATA	60
ACGCTGCACA ACACAACCTG GAAATCAAGC AACACCGGCA AACCAAGCAG GTCAAGGnAA	120
40 TAACCAAGCA ACACCTAATA ATAATGCAAC ACCGGCAAAT CAAACACAGC CAGCGAT	177

(2) INFORMATION FOR SEQ ID NO: 3142:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 204 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3142:

CTTTTTTAGC ATTTGGTTTA ACAACChGGT GTTGCAGTAT CCCCACTTAA GGTCTGTATA	60
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ATTCATTT TATGTCCTC GATAACTTGT ATTGCTGCTT GTTTCCCTCC ATCTGTCAAT 180
 CCATCATTG ATTGAGAGAA nCAG 204

5 (2) INFORMATION FOR SEQ ID NO: 3143:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3143:

GTGATGCCAT ATAAATTGGC AATAATGGCA CAAGTACTGT CAGTCCAGCA ATCGCTATAA 60
 ACTGACTGAG CCATAAAATG CGAAAGTTAC TGCGCCATAT AGACTGATTA ATCATATGTC 120
 20 ACCATTGGAT TTGGTACGGT AGTTAACCT GAAGGCATAC TACCCTCCAC CCACATTATTC 180
 AACGTTGGAT nATAGGCAAT GGGTAATTAA AAATTTGTT TTTGAAATGG GCCCACGGGC 240
 TTGTTTTAAT CAAAATTAAA AAATTGTGGT nCTTGGACC 279

25 (2) INFORMATION FOR SEQ ID NO: 3144:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 514 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3144:

TGACTTAATC AAAGCATTG ATCAAAACAC CAGAATACCA TTATTCTTTA ATATGTTGA 60
 CAGTAAACTC TnTATTATTT GTTGCTGTTG GATCCATTGT TCGTCTTTCA ACAAAAACnT 120
 40 GACCCAGAAT GAAGTCCGAT AGAGTCAACA AAGCTATAGT ATTTGTAACC ATCTTTAGT 180
 TGATAAATGC CACGCGCATC TGTTATTGCG TCATTTTAG GTAcAAATTG AATTTkGAGA 240
 TTTCTCaCaT TATCAGGTAC TTTAAATAAA CGCAAAGTTG GACCGnCTTC AACAGTCTTT 300
 45 TCAGCAATCG TATCATTAGT ATCAGCATT TTGATAATAA CATTGTTGC GCCTTGACCG 360
 TTTTTAGTAG TCATTGTATT AAATCAAGGT TAATTCAAGAA TTGGGATTAA CTGTTAATGC 420
 50 TTTCTCGATA CCATTAAT CGCCATGGTC ATTGTATCA GTTCCAGTAT ACGGCCTAAT 480
 GCAATACATT TGCCTGTGCn TGATAGTnCT TATT 514

(2) INFORMATION FOR SEQ ID NO: 3145:

- 6
- (A) LENGTH: 302 bas pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3145:

10	ATTCAGACTT TGCATGTGGA ATGGCCACGT TCATGCCAAT AGCTGTCGTA CTCCCATTTC	60
	ACGTTCTAGT ATTGCATTTT TTAAATGCGA TGTGTGCTCT ACATAACGGC AAATTTAAG	120
	TTTTATGAAT CAACATATCC AATGGCTTCG GTTTCGAGAC ATGTCCGTGG ATTCACTAAT	180
15	TAACCATACT TTGGTTGGAT CCAAAACCAT GAGnAGGGTT TAATGGAGGA TGThGAATGG	240
	TTCnCCGGTG GTTAATCCTA CATGGTCCAC CCTCCTGGTA ACCATGGTGG TGGTAATAAC	300
	CC	302

20 (2) INFORMATION FOR SEQ ID NO: 3146:

- 25
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3146:

	CAGGAATAGG ATCATTTGCA TCCATAGCTT CACTTATTTT TTCAGAAAGCT AGCGTACAAT	60
	CATTTAACATC TACGCCACCT TCTTTATCAA TAGAGATTCT AAGAAAATGA TCTCTACCCCT	120
35	CTTTGACCAT ATTCAACGTC TACAAGTTCC AAAATTCAAG GTCTTCCCAT AATTGGGTTT	180
	AACCAATCCA CTTTCTACCT GGTTTCCGGT AAATTTTAC CTCCATACCA GGGnCCTCCC	240
	CCTTTTTTGG GCCAAAATAG GAAAAAnGAG GCGGGGGAAA TCCTCCCCCCC AATTCCnTTC	300
40	CTGGCCCTGG AGGTTTCCAC CTAAATTTTT TT	332

40 (2) INFORMATION FOR SEQ ID NO: 3147:

- 45
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3147:

	GAGAGTGGTT AACAAAGCAAA TAGAAATAAT TAAAAATGCA GATGCAGATG CATCGGCGAA	60
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5' CnCCAACAAA TGCAGAAAGTT GCTGAATTCC AAATGTAACG ATACCTGCCC ATGAGCGATG 180
 TGCTCAGAAT GATCAGAGCT AATG 204

5 (2) INFORMATION FOR SEQ ID NO: 3148:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 217 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3148:

CAACCGGGAC AGGTGGGGTT ATTGGACGTT ATTTTG GCC TTTGGATTTT AAGATATTGG 60
 TCGAAAAGAG ATTACATAAA ATTGTGGCCA AATGCGGATT GCATATTATT GTAACGCCn 120
 20 CTATTGCATT GTTGATTGTT AGGnCTATTA ACTATCTGGA TCTGTATGCC ATTAGCCAGG 180
 TTTTGTTCAGACAGTTAG TTTCAGTAGT TAACCGA 217

(2) INFORMATION FOR SEQ ID NO: 3149:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3149:

35 CTATTATTAT ATTCCGCGGT GTACGTATAT GTGCTACGTT ATCTTCGTTA ATTGTACCGA 60
 TTATGGCTAT CAITTA CATT GGTATGGTT TAGTAATATT GCTATTTAAT TTAGATCAA 120
 TTGTTCCCTAT GATAGGTACAC GATTATTAAn AGTGCATTTG GTCATCGAAC AAGT 174

40 (2) INFORMATION FOR SEQ ID NO: 3150:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 181 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3150:

55 GGGACCGAAT TGACTTCAGC ATTACCAGCA AATTGATTAA TnTTGTGGGC TGGTATTGGC 60
 TCTGGCGGTn CCATTACAG GTACCGCACG TTATTAAGC AACATCACGG GCAATGTTAT 120

A

181

(2) INFORMATION FOR SEQ ID NO: 3151:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3151:

15	GTTTTAATTG AGCGACATAC TCTTCTGTTA GCTCTGCTAC TTTTTAAAAT AGAGCGATTG	60
	ACATCAAACA TAACTGCTAA ACGCTCAACG TCTGCCCTCG TAATGGCTTT TGTAGAAATT	120
	CTAACTAAAT AATTTCGAAT GCTATCATTG GTTGTnTCAA CAGCTTGATG CT	172

20 (2) INFORMATION FOR SEQ ID NO: 3152:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 209 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3152:	
	ATGGACGTTG AGACATTTAT AAGCGATATA GATTCGCAT GTTGCATTAA TTAAACCTAA	60
	TAATGGTAA CGACAAGTGT GACTGTTACT GGACTTTAAT GAAGGTAGTA ATCAGAAATGG	120
35	AAATCAACCA AAAGTAGGTA TTTGAATnTT GGGATAATG AGACATAGCG AGAGTGTATA	180
	TGCAATACGA CAGTACTnTA AATTAAGAG	209

40 (2) INFORMATION FOR SEQ ID NO: 3153:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3153:	
	TTCTCACAAA GCGCTCAGTT GAAGTAAATC CACCTGGACA ATCCAAATGT ACCTGCTTCA	60
	TTGCCTAAAG GTTCAATCGT TAnACCTTCC AATAAATTG CTGTTGCTGG ATAAGGAGAA	120
	ATTATTGGTA TATTGTCTTA AATTACTATG ATGCCAATTG AAGGTCTGGA TGAT	174

55

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3154:

GGATCACATC GTTCATTTAC ACAATCTATT AATATTCAAT GGCACAATAT AGTGTGTTATG	60
GCATTACCGA TATGATTTAG TAGCnCACCA TTATTAACCG ATCTCTATCT GTTAAAAGGA	120
ACTTAAGAGC AATGTTGCG CATCATCATT TTATGTTGCG TCTTTGCACG AGTTTGCGA	180
AACTTTACAA TATTTGTGTC GGATGATTAT TTAACCTTTG QAGAATGTTG ATGGCACAGT	240
CCACTATAnC AATCACTATC GCAATGG	267

20 (2) INFORMATION FOR SEQ ID NO: 3155:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3155:

AATTAAAAAT CAAGCAACTG CTGCAAAAAT GCAAGATCAA ACTGTTCCCTC AAGAAGCAAA	60
TTCTCAAGTA GATAATAAAA CAACGAATGA TGCTAATAGC ATAGCAACAA ACAGTGAGCT	120
TAAAAAATTCT CAAACATTAG ATTTACCACA ATCATCACCA CAAACGATTG CCAATGCGCA	180
AGGAACCTAGT AAACCAAGTG TTAGAACGAG AGCTGTACGT GTTtAGCTGT TGCTGAACCG	240
GTAGTAAATG CTGCTGATGC TAAAGGTACA AATGTAAATG ATAAAGTTAC GGCAAGTAAT	300
TTCAAGTTAG AAAAGACTAC ATTTGACCCCT AATCAAAGTG GTAACACATT TATGGCGGCA	360
AATTTTACAG TGACAGATAA gTGAAAYCAG GGgATTATTT TmCacGAgTT ACCAGATattT	420
TActGGTAAT GGAGACGTGG GATTATTCTA ATTCAAnATAA TACGATGCCA ATTGCAGACA	480
45 TTAAAAGTAC	490

(2) INFORMATION FOR SEQ ID NO: 3156:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3156:

5	CCTTCAGTAC CTTGTAATAG TTAnTTAAAT GTTCCGATCA TCGTGTAGTG TGATTCA	60
	TACGGCCTT TCAATTGAA TACGATCTAA ACCGTTTCGT CAGGTGCTAG TAAGTTACCT	120
	TCGCCACCTA AATAAGAAGT TCACTCGTTA CGATTTTTTC AGATAGCATC ATTGGTGGAT	180
10	TCGTAACTTG TGCAACAGCT GTTTAAGTAT TAATAGTGAT TCGGTCGTCT TCACATGCAT	240
	TGGCGCACAA TCCnTGCACC GT	262

(2) INFORMATION FOR SEQ ID NO: 3157:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 170 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3157:	
	ATGGTAAAAA TTGCACTATC TGCTCGGGAA ACGATTTTGC ATAACCTATT GTTAATTTTT	60
25	TACCTGTTGA TTTAGCTGTA TCTGnCCATT TTTGAGCTT CTGCTGTCGT TTTAGCCATT	120
	GGGTTTTCAC ACATCACATG TTTACCAGCA TGCAACCCTG GCTACAGTAA	170

(2) INFORMATION FOR SEQ ID NO: 3158:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3158:	
	CCAGGCAGAG GAGCAGCACA CCAATACACA ACCAGCTGGA CAAGTGATCA GCTGATCCGA	60
	ATAACGTGCA CAAGACAACC TGGAATCAAG CAACACCGGC AACCAAGCAG GTCAAGGAAT	120
	ACCAAGCAAC ACTAATATAA TGCACACCGG CAAATCAACA CAGCAGCGAA TGTCCAGCAG	180
45	CAGCGAACCA GCAGCACTGT AGCAGCAACG ACAACTCAGn CCAATGTAGC ATATGGTGAG	240
	GCAGTTTATA GACATACATT GTGnCCTGCA TTCACAGTGG ATAGCAGGTC CACTGTACTG	300
	TACAGTAAGT An	312

(2) INFORMATION FOR SEQ ID NO: 3159:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 171 base pairs

- (C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3159:

AATCACATCA AAAACTCAA TTGTTTACGT TGGCAACTAA CTTTATGTTA GAACGCACAC	60
10 AATATCTAAT GTTIAAAATC TATCGTCGCA AGATGCTTCC TGnTAATTAT CAGTGCCATT	120
TTCGATTGGG TTATACAATC TAGTAATCGC ATGATAATT AATGCTACAA G	171

(2) INFORMATION FOR SEQ ID NO: 3160:

- 15 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 211 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

20

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3160:

25 CTTGTTCAATT TAATCCATAT AGTATAACGAC GATGTACTGG TTTTAAACCG TCACGAACAT	60
CTGGCAATGC ACGAGCAACG ATAACACTCA TCGCATAATC TAAAATGAT TCACGCATTT	120
CACTGGTAAT ATTCGTTCA TTAATCnTGA TTGAGGGAAT TCCGCCCATC CAGAnGTCCC	180
30 CCCTCCAAAG TTCAGTTCCA CAGGGGCTAG A	211

(2) INFORMATION FOR SEQ ID NO: 3161:

- 35 (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 321 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3161:

GCACAGGTAG CGGTAGTGGC GGTCGTATGA TGACTTTGGT AATCTAAAGC AAAATGTACG	60
ATAATAATAA ACGTCGTTTC GTTTCTCTGA TGTAGCAGGG GCAGTGAAGA AACAAAGATTA	120
45 TTGAATTGTT GATTCTTGA AGATATAAAA ATTCAAGAAAT GGGTCTAGGA TTCCTAAGGT	180
GTCITCTTTT GGGCTCAGTA CGTAAACATA TTGTAGAGCG TGCAGTGAGT GGCGCACCAT	240
50 CTCTTTGGG TCAGnTTGG AGTTTTGTTT GTCGGCTGTC GGATTnTCGT ATGTAGGAAC	300
GGCTGTTCAC TTnCGTGGAT G	321

(2) INFORMATION FOR SEQ ID NO: 3162:

55

- 5
 (A) LENGTH: 159 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3162:

10	AACATTTGAG CAATATCAAG AAACATTAGA GTATATTTA TCCCATCATG TAACTCGTAA	60
	TACAGCAATT ATTGCTTTGG GTGGTGGTGC ACTGGTGATT TTGCTGGGTT TATTGCCGCG	120
	ACACTTTAC GAGGCGTGCA CTTTATACAA GTGCCAnCG	159

15 (2) INFORMATION FOR SEQ ID NO: 3163:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3163:

25	GTCAGTTATG GCAAGTGCAT CAACATTTTC AGACACAGAC AAGTCTTACG GCATCTTCTA	60
	TTTTTAAGCT TGAAATTAA CAAATCATAA GCCGTATGAA TATTTAAATA TGCCACCATG	120
30	ATTGAATGGC CCCTTTCTAT TAGTTAnGTT TTGTGCG	157

(2) INFORMATION FOR SEQ ID NO: 3164:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3164:

40	TATAAAAATA TAACGCGGAC AAAAAGTGA GTTATTACTG ACAAAAGTATn TGAGATTGTA	60
	ACAGGATATA TGAAGCAATA TCAGTTGATC CAACTGTCAT AGGTATTCA TCAGCAGGnG	120
45	TTGTTGATGA ACAAAAAGCG AAATTGTATA GCAGGCCAAC ATTCCGATTA TAAAGGTATA	180
	ATTTTAAGGA TTATTAAT CATGTCTCTT ATGTCA	216

(2) INFORMATION FOR SEQ ID NO: 3165:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3165:

5 AGAAACACTT CTATTGAATC GTCTTACTGC TGTTCTCTAT TTATAACACT TCGTATTGAA 60
 TGAATTCAATT ATGCCTATTT GACACATTAT TGAAGTTTC CTAATGCCTG GATCCTTTAT 120
 ACGTTACGGC TTCGTGCTAT GTTTTGGTAC ATAAAGCTTT GACATATCGA nATTC 175

10 (2) INFORMATION FOR SEQ ID NO: 3166:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 15 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3166:

ACTGTTACAA CAAATTAAAA ATACAACAAG CGAGATATAG TTATTGTTGC TGGAntGTAC 60
 CAAGTAGTAT TCCAAGCGAT GCTATGGCAA ATTGCACAAA TTACAGCACA GACAGGTGCT 120
 25 AAATTAGTAG TCGACGCTGA AAAAGAATTG GGCTGAAAGT 160

(2) INFORMATION FOR SEQ ID NO: 3167:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 156 base pairs
 30 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3167:

TGTGGGGGAA ACCTGCACAG CAAAAACTAA AGCTTATCGA TACATCTAAA CATTGTATTA 60
 40 TAAAATCAGT GCATCCTAGT CCACTGTCTG CATATAGAGG ATTCTTTGGA TCAAAACCGT 120
 ATTCCAAAGC GAATGCCTAT TTAGCGTCAG TAGGnA 156

(2) INFORMATION FOR SEQ ID NO: 3168:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 50 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3168:

GTGGCGAGAA ATACCGCAAG CATAAAGATA TCTTGATCC AACTTACCAA CAGATCAACG 120
 GAAAAGTACC AGGTAACCAAG GAATCAAGAT CCAGACACAG GAAAAGTGTAT CGAG 174

5 (2) INFORMATION FOR SEQ ID NO: 3169:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 213 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3169:

TCAAAACGGGG TCAATTCAA ATGGAAAAAT TATACCGCAT CTTCTCCTGA TAACTACGTG 60
 ACCTTATCTT CTITATATT GCAGACCACG AACATTCAA CTGCATGCTT GCTCGATTGG 120
 20 CAATGTCATA TAACTAGTAA CATGATCATC nCATCAAATT TAGTATGTCA AATGTCCCAA 180
 TCAntTAATTG GATCGGTGTT GCTCAATTGA TTA 213

(2) INFORMATION FOR SEQ ID NO: 3170:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 380 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3170:

AAAGCACCTT TTCCTTAATGA AAGTTGTGCT ACTGGTATCT GTGTTTGATT TACAAAATCT 60
 35 TCTAATTCTT GATGGAGGTG AAAACTGTTA ATTTCATGTC CAGTAATGAT GATAGGCTGC 120
 TTCGCTTGAT GCAGTTTAGT TGCTAATAAC TCTATATATG TTGATGCATC CGTATATTAA 180
 40 GTTGCCGTCA CTTCAAATGG TGTCGGTATC TCAATTTCAG AGATTGCGAC ATCGATTGGT 240
 AAATGTAAAt GAACTGGCG TCTTTCGGCG ATTGCTGTAT TAATTAAACG TGGTATTTCG 300
 GTTGTGCA TTTCAAGGTGT GATATAACCT GTGCACGnTT ATATGTGCAA ACATTTTCG 360
 45 ATAGTCGTCA AATGTACChn 380

(2) INFORMATION FOR SEQ ID NO: 3171:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 401 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3171:

5	TAGAAgGTAA GAAGGATCCT ATCGGTGC ^A TGGGATATGA TGCGCCAATT GCAGTGTG ^A	60
	ACGAGCGACC AGAAC ^T CACTA TTTAATTACT TTAAACAGCT GTTGACCAA GTTACGAATC	120
	CACCAATTGA TGC ^G TATCGT GAAAAAA ^T CG TAACGwGTGA ACTTTCTTAT TTAGGTGGCG	180
10	AAGGTAAC ^T ACTAGCACCT GACGAAACGG TTTAGATCG TATTCAATTG AAAAGGCCGG	240
	TATTGAATGA ATCACACTTA GCAGCGATTG ATCAGGAACA TTTTTAAATT AAC ^T TATT ^T TA	300
	TCAACGGTAT ATGAAGGGGG ATTTGGGAAG ATGCGTTAGA AGCATTAGGC CGAGAAGCAG	360
15	TGGAATGCTG TTAAGCAAGG GCGCTCCAAA TTCCTAGTGG T	401

(2) INFORMATION FOR SEQ ID NO: 3172:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3172:

ACATAATT ^T TA AAATAATATT ACATTTGTAA TGGnCACCAA GTAACGTTTC GGTTGCTTGG	60
30 TGTTTTTTGG TATGAATTAC TTTCTGTTAC AAAACAATCT AAAGCGTTCT GTTATGTTTT	120
ATTAAGATT ^T AATTACAAAC GGAAACTAAA TGTAATAGAA TAAACT	166

(2) INFORMATION FOR SEQ ID NO: 3173:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 160 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3173:

ATAATGAGAn TGTTGTACGT TATGGTGGTG GAAGTGCTGA TGGTGATTCA GCAGTAAATC	60
45 CGAAAGACCC AACTCCAGGG ACCGCCGGTT GACCCAGAAC CAAGTCCAGA CCCAGAACCA	120
GAACCAACGA CCAGATACCA GAACCAAGTA CCAGACCCAG	160

50 (2) INFORMATION FOR SEQ ID NO: 3174:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 158 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3174:

5	CTTTATATAA AGAAGGAATT ACTAACATA CAGTTAGATT ACITTCATGCA ATCGAATTAG	60
	AACGTTTCAA TTTAAGCCGT AGATTAGGTT TTGAATTATC AACAGCnAAA GAATCACGTA	120
	TTGAACGGGG GTTATTAGA ACGTGATAAA GAAGGATG	158

10 (2) INFORMATION FOR SEQ ID NO: 3175:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 154 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3175:

20	TATTTGAAGA TGGCTGTGTA CAAAAATCGG TGTTACGTGA TCATGATACT GTCAGAATT	60
	ATAAACCATG GCTAACAGCA CATCAGCTT CATGCCnA GTATGTCGTC AGAGAAGATA	120
	CACCTAATCG CTAATTAATG AGGTTGGAA ACAT	154

25 (2) INFORMATION FOR SEQ ID NO: 3176:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3176:

40	AGAAGGTATT TTAGCTCAAT CTCCAGGTCT AAAGGTTGTT ATTCCCTTCAG CCCATACGnT	60
	GCGAAAGGTT TATTAATTTC TTCTATTAGA AGTAATGACC CAGTCGTATA CTTAGAGCAT	120
	ATGAAATTGT ATCGTTCATT CCGTGAAGAA GTACCTGAAG AAGAATATAC AATTGACATT	180
	GGTAAGGCTA ATGTGAAAAA AGAAGGTAAT GACATTCAA TCATCACATA CGGTGCAATG	240
	GTTCAAGAAT CAATGAAAGC TGCAGAAGAA CTTGAAAAAG ATGGTTATTG TGTTGAAGTA	300
	ATTGACTTAC GTACTGTTCA ACCAATCGAT GTTGACACAA TTGTAGCTTC AGTTGAAAAA	360
	CTGGTCGTGC AGTTGTAGTC AAGAAGCACA CGTCAAGCTG GTGTTGGTGC ACAGTTGTAG	420
	CTGAATTAGT GACGTGCATC CCTTCATTAG AAnncCTATG GAAGAGTGCA CA	472

50 (2) INFORMATION FOR SEQ ID NO: 3177:

- 5
- (A) LENGTH: 150 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3177:

10 TGAAAGCTGG CGAATACAGT GATTGTCATG ATGCGGATCT AnTTGTCATC TGTGCTGGTG 60
 CTGCACAAAA ACCTGAGAGA AACACGTTA GATTAGTAT CTAAAAACTT GAAAATATT 120
 AAATCAATTG TTGGTGAAGT AATGGCATCA 150

15 (2) INFORMATION FOR SEQ ID NO: 3178:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3178:

TTACTCTATC TTGATTGAC GAAATACTAT TAnGCTAATA TCGATATTAA 60
 TGATGTTCCA AAGCAAGCCA TTTCGATGGA CTGCTAATAT TCTTCAGCCA AACGTATCAT 120
 30 TTTACTCGCA TTTGGTGAAA AGAAACGGCT GCTATTACAC ATTAT 166

(2) INFORMATION FOR SEQ ID NO: 3179:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 170 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3179:

CTTCGACTCT AGAGGATCCC CGCGCTCAA TTCTAGTGTT AGATGATACT GGATTAGTTG 60
 45 ATAGCAATGG CTTTGCAATG CCGATGTTAC TCGCAATAAG TCATGTGCAT CAATTACTTA 120
 TTAAAGCAGA TTTACGTATG TCTACAAGTT TAAnTTCGCTA AATCTGGTGA 170

(2) INFORMATION FOR SEQ ID NO: 3180:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3180:

AGCTAAGGTT	GC ⁿ TGGCG	TTGCCCA ⁿ T	TGGTTAGTCC	AGGTGGTCGC	GGTGGCCATC	60	
5	GGTGTATTCTG	CCAGGTCTT	CAGCCAGGGT	TTTACTATT	ATATCCAGTT	GTAGCATTCA	120
	TGATTGGGC	GATTGAGAT	AGATTCATCA	ATGAAATTAA	TTTCTGGATT	TTATTCGTTG	180
10	GTATTTATTT	GGGTATACAT	AACTATGGTA	CATGATAGGC	AGATATAACAA	CATTACAACA	240
	TTCATTCTAC	TATGCTGGAA	ATAACATGAC	AGTGATGACA	CTACTATCCC	CGTCGCA	297

(2) INFORMATION FOR SEQ ID NO: 3181:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20	CACTAGGTAC	CCCAAAACGC	CAGAGGAAC	TGGTTAAATC	GCAC	TTACTT	GGTGGCTCCA	60
25	ATCAACTGGT	ACTTCATAAC	GTTTGGC	ATC	TTCGCC	ACTT	ACCACTATT	120
	CCTAATTGGT	TCATGGCTTG	TGCTAACGTT	TCATGTGCTT	CCGCTGAAAT	CGATCCATAA	180	
30	CTCATCGCCC	CTGTATTAAA	CGTTTGACA	ATGTC	ACTTA	CCGGTTCAAC	TTGGTCGATG	240
	TCAATCGgtG	TACATGCTTT	AAATTCAAGT	AAATGTCTAA	TGTG	aTCTGT	TCTATT	300
35	TTnCACCGnT	TnCAGAGTAT	GCTTTAAATT	GCGCCATAGT	CC	ATTTCT		349

(2) INFORMATION FOR SEQ ID NO: 3182:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3182:							
45	TACCAACACG	TACACCTTCT	AAAATAACTG	CATTTGCACC	GT ⁿ TTAATAC	ATCATCCTCG		60
	TTTATAACCG	GTGTAAGCAC	TAGGGGGTTC	AATCACACCT	GCTAATACTG	CGCCAGCCCT		120
50	ACATGTACAT	TTTTACCA	GTG	GTACG	CACG			149

(2) INFORMATION FOR SEQ ID NO: 3183:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 147 base pairs

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3183:
GCGGTGCCGG TGTTGCAATT GGCGCAGTGG TGTTGGTAGC ATGTGGTCTT TCAATCAATG 60
10 TTCAATACAC CAGGAGATCC GGAAAAGATG CGTATGAATT TTATGGTAAG TGCACCAGGC 120
ATTACCACAC CACGCAAA CATGCAT 147

(2) INFORMATION FOR SEQ ID NO: 3184:

15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 180 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3184:
CAGCGATATG TTGGCGTTGA AAATCTGCAA TTTGTTCTATA ATTCTCTGTAAAGAACGAC 60
25 TTAAATTGAT AAAAATGGAT ACGATCTCTT GGTAAACAGT GACATTTCT CAATCGCGT 120
ATGATGTTTG TGGCACCGAC CATCGAGAAC ATGAAAAATCT CATGTCCCCAC GCTAGTCGnC 180

(2) INFORMATION FOR SEQ ID NO: 3185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3185:

40 GGTAAATACG TATTAATCAG ATTAAGATCT GGTGAAGTTC GTATGATCTT ATCTACTTGG 60
 CCGTGCTACA ATCGGGnCAA GTTGGTAACC TACAACACGG GTTAGTTAAC GTTGGTAAAG 120
 CCGGCACGTT CAAGATGGGA AAGGTATCCG 150

(2) INFORMATION FOR SEQ ID NO: 3186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

GAATTTAGG TGAATCAGAA GATTAACGCT GTTGCCTCCT AAGCTAACAG ATACTGGTC	60
GTCAGTTGTC GTTGAAAAAG CGAATGAACA ATTTAATAAA ACCGTAACTC GAGCATTATT	120
5 AGAGGAAGCT AACCAAAGCA GGTTTA	146

(2) INFORMATION FOR SEQ ID NO: 3187:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 165 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3187:

AAATTGGCGA GTATGTTGTT ATTGGGTCA GACTCTGAAA TTAACAATAG nTACGATTGA	60
20 AAATGGTGTGTC ATGTATTCAA CAGTCTGTTG TTAATGTATG CTAGTCGTGG TGCGAATACT	120
AAGGTCCGAC CGTTTGCAC ATTGAGACCA GGCGCGCAAT TAGGG	165

(2) INFORMATION FOR SEQ ID NO: 3188:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 166 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3188:

CAGTTTAGTG GAGACGAATC TAAACGAAAC AAAGCGATTG GACGTGCATC AGTTGTACCA	60
35 ACATTCTTTG GTGTAAACGn AACCAATTTT ATTGTTGCC ACCACTAGTT ATTGGAATCC	120
TGTGTTCTTT ATTCCATTG TATTAGCACC AATTGTTAAC GTATGG	166

40 (2) INFORMATION FOR SEQ ID NO: 3189:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 146 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3189:

50 AACCCTTTAT CTAATCCATT TTCAGTTAAG CGATGACCGC CTGCTAAAAT TTGTGCATCT	60
GATTCTTTG CTGCATCAAT ATATGATTGA ATTTTATCTA ATTGATCCTT ACCAGTTGA	120

(2) INFORMATION FOR SEQ ID NO: 3190:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3190:

TCCCCCAAAG GGTTTAAGGG GTTAACCCGG GTTTGGGAAA AATTTTTTAA CCCCCCTTAA	60
15 AaTTCCCGGG AAAAAGGAAA CCCGGGTTTT TAAAAAAAAC CCGGGGTTCC CAAAAATTAA	120
TTGGGAAAGG GAAAGGAAAA AAGGGTTAAA AAATTTTG GAAAAACCCG GGCCCAnAAA	180
AAAGGGTTTT TTTCCCTTA AAAAAAATTAA	212

20 (2) INFORMATION FOR SEQ ID NO: 3191:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 148 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3191:

CTTCACTGAC TTTAGCAATT TCATCACCTT TTGCCCCCTAC AACGATAGCT AATGATTAT	60
ATTGTAAACT CAATGACCT TGTTGAATAC CTTCTGACAC AAGCGCGCGA CATGCTGCAA	120
AGTTTTGCAC TAAACCAACG GCAGCAAC	148

35 (2) INFORMATION FOR SEQ ID NO: 3192:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 212 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3192:

CTGCTAATCC GAAATCTTT TGGAGTTTA TTAAACCAGC TGCTTCTAAT AGTTTAAGTG	60
CACGTGCTTG GTTTGACACA TCATTTGGAA TGACAACTTT AGCnCCATCT TTAACCTTT	120
50 TGACATCTTT AATTTATCT GCAGAAATAA ATCCATCACG GATGGCTCTT AAATATATGT	180
TACGTGATAA TTTCTCGAnA AATGGCTTCC CT	212

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3193:

TCGTGCAGTG GTCTTCTGTT AATTGGTGAA TTTGGATACT GGTTATATTC AGCTGCACCG 60
 CAAGCAACTT CTATTGATGG CChAACTGCC TTTTTACCTC AAGCAATGGG TATGGTAGTT 120
 GTTGCAGTCA TTATGGCTT T 141

(2) INFORMATION FOR SEQ ID NO: 3194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 1290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3194:

AATAACGTTCTGAAAAAACGAAGATGTTTTAAATGCCTATA	TCCGCGGTCGTGGCGGAATG	60
GCAGACGCCGTAGGTTGAGGCCCTAGTGGAGAAAATCCCC	TGGAGGTTCAAGTCCTCTCG	120
GCGCATTCAAATTCTTAATTAAATAAGC	GGGTGTAGTTAATGGCAAAACCTCAGCCT	180
TCCAAGCTGATGTTGTGGGT	TCGATTCCCA	240
TCACCCGCTCATAGATAATTAAATGAAAC	TTTAATGAAAC	300
ATTGAAAATGAATGACAATATGTCAACGT	TAATTCCAAAACGTAACTA	360
ACATTATTAACTGTCAACGT	TAAGTTACAA	420
GTATTTATGAGCTAATCAAA	CATCATAATT	480
TTTATGGAGAGTTTGATCCTGGCTCAGGAT	GGCGTGCCTAATACATGCAA	540
GTGAGGAA	GTGAGGAA	600
CGGCGGACGGCTGCTCTCTGAGTAAC	CGTGGATAAC	660
CTACCTATAACCTGGGATA	CTACCTATAAA	720
ACTTCGGGAAACCAGGAGCTA	ATACCGGATA	780
ATATTTGAA	ATATTTGAA	840
CCGCATGGTTAAAGTGAA	CCGCATGGTTAAAGTGAA	900
AGACGGTCTTGTGTCACIT	AGACGGTCTTGTGTCACIT	
ATAGATGGATCCGCGCTGCA	ATAGATGGATCCGCGCTGCA	
TTAGCTAGTTGGTAGGTAAC	TTAGCTAGTTGGTAGGTAAC	
CCGCGCTGCA	CCGCGCTGCA	
TTAGCTAGTTGGTAGGTAAC	TTAGCTAGTTGGTAGGTAAC	
GGTAGGTAACCGCTTACCA	GGTAGGTAACCGCTTACCA	
AGGCAACGATGCATAGCCGA	AGGCAACGATGCATAGCCGA	
CCTGAGAGGGTGATCGGCCA	CCTGAGAGGGTGATCGGCCA	
CACTGGAACTGAGACACGGTCCAGACTCCTACGGGAGGCA	CACTGGAACTGAGACACGGTCCAGACTCCTACGGGAGGCA	
GCAGTAGGGATCTTCCGCA	GCAGTAGGGATCTTCCGCA	
ATCTTCCGCAAGGTCTTCTGAGTGTGATG	ATCTTCCGCAAGGTCTTCTGAGTGTGATG	
AAGGTCTTCTGAGTGTGATG	AAGGTCTTCTGAGTGTGATG	
GATCGTAAACGAGAC	GATCGTAAACGAGAC	
CTCTGTTATTAGGGAGAAC	CTCTGTTATTAGGGAGAAC	
ATATGTTAA	ATATGTTAA	
GTAACGTGCACTCTTGAC	GTAACGTGCACTCTTGAC	
GGTACCTAATACATCTTGAC	GGTACCTAATACATCTTGAC	
CAGAAAGCCACGCCAAGCAG	CAGAAAGCCACGCCAAGCAG	
CCGCGGTAATACGTAGGTGG	CCGCGGTAATACGTAGGTGG	
CAAGCGTTACGAG	CAAGCGTTACGAG	

CGGCTCAACC GTGGAGGGTC ATTGGAAACT GGAAAACITG AGTGCAGAAG AGGAAAGTGG 1020
 AATTCCATGT GTAGCGGTGA AATGCGCAGA GATATGGAGG AACACCAGTG GCGAAGGCGA 1080
 5 CTTTCTGGTC TGTAACGTAC GCTGATGTGC GAAAGCGTGG GGATCAAACA GGATTAGATA 1140
 CCCTGGTAGT CCACGCCGTA AACGATGAGT GCTAAGTGTGTT AGGGGGTTTC CGCCCCCTTAG 1200
 10 TGCTgGCATA ACGCATTAAG CACTCCGCCT GGGGAGTACG ACCGCAAGGT TGAAACTCAA 1260
 AGGAATTGAC GGGGACCCGC ACAAGCGGTG 1290

(2) INFORMATION FOR SEQ ID NO: 3195:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20
 25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3195:
 TGGTACAGAG TTATCGCTGG TGGCCTGTT CGTCCGTAC TTGAATTATC AGGTATCACT 60
 GATATCTTAA GTAAATCATT AGGATCAAAC ACACCAATCA ACATGGTTCG TGCTAACAT 120
 CGATGGTTTA CnAAACCTTA 140

(2) INFORMATION FOR SEQ ID NO: 3196:

- 30 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

35
 40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3196:
 CTATTGGATC AGGAGGCAAC TACGCTTAAG CGCAGACTGC CCATTGAAAC GCCATGCATC 60
 GCATTTGTCG CCTGAAGAAA TGGCATATGA GAGCTTGAAA GTAGCGGCTG ATATTGTGT 120
 CTTTACCAAC GnTAATATTG TTGTC 145

(2) INFORMATION FOR SEQ ID NO: 3197:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10	TGTCGAGTTG GAATTGGACG ATTGAATATC CCATCTCCAT CACTATCAAA GTATGGGAAT	60
5	TGAATTGTTT CTAATTCGTA TCCACCTTCT GTCATTGATA ATGTAGGGTT AATTTAGAA	120
15	CCATCTkCTG TTTCTAGTTT TAAGTTCCAC TTCTTACCTT CTTCCCAACG TTGACCCATT	180
20	GTGCCATTAG GTACTACTAA ACTATCGCTG ATTGCATCAT GAATAACTGG CTTCCATTCh	240
25	CCTTGCTCTG TTGTTTGACC TAAGTCACTC GCGCTnAAAAA ATCGACCCGC TTTATATCCA	300
30	TnTTTCAGCTG	310

(2) INFORMATION FOR SEQ ID NO: 3198:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3198:

20	TGCTTTATTAA ATGCATTGGC TAATAATCCA CTTGTACCAAC CACCGGCACA AAGTACTAAG	60
25	AGGTTTGTTC TGTGATATTT GAAGCTTAG TGCACTCGTCT GATACACCAAC TTGCCGCTAA	120
30	AATTGAATCA GCTTTTnTCG	140

(2) INFORMATION FOR SEQ ID NO: 3199:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 184 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3199:

40	TGGTGATTTC AAATCATGAG ACTGGGACAA AATGATGTTT TCATAAAAAT TATTCGTTG	60
45	TTCCACTCTC ATGATTTTTTG TGATGAACAT AATTACATGA TTGATTGCAT CATTGTTAA	120
50	AACCACTGAT TGCAACCTGC CATTACACAnG GAAAATTACC TAATAAGTGG CGTATTTACC	180
55	AGTC	184

(2) INFORMATION FOR SEQ ID NO: 3200:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 163 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3200:

TTGAGAACGG	TTTAGGAAGT AACGTTAAC GACGACAGTC	GTTCAATGCG ATCAAAATGT	60
5	TTTAACACAT GAATCGCTCT CGTACTATTG	GTGTGTGACA CATGTTCTTC CAGCATTG	120
	TTAATGAATG CTTTTCTTC TTGGTnTTA ATCTTTGTAA ACG		163

(2) INFORMATION FOR SEQ ID NO: 3201:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 149 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3201:

20	GTTATGTTG AGACTATAAT GAATAAATAT TTAGAAATAT GACTCCGATT GTTCGATGCT		60
	TAATTCAGTT AGAACCATCA TAAGAATGCA TGATTACTGG TGTAAAGATA CGTAATGTnT		120
	TGTATTGACT GGATGTCTTT GGATAGAGT		149

(2) INFORMATION FOR SEQ ID NO: 3202:

- 25 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 192 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3202:

35	CAAGTGACTG AGATTACTGA AGTAAACCCG TTACCGCCAC ACTATATTG TCCGAACGT		60
	AAAACGAGTG AATTTTCAA TGATGGTCA GTAGGATCAG ATTGATTAC CTGATAAACG		120
40	TGTGAAnTTG TGGAGGCCAC TATTAAAGAA GACAGAATCC GTTGAACATT TAGATAAGGG		180
	AAAGTCCGAT TC		192

(2) INFORMATION FOR SEQ ID NO: 3203:

- 45 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3203:

CGCCATCTAA CGTTTTTGT ATTCTGTT GCTGAGCTAG TTGTAAGTGC CnCATTAAGC	120
ATCTTATAGC GTGATAGCCA TGCGCCAACG TACAAATCTG CTCCGTATTG TACGCACCAC	180
5 TAAGCAGTAC ACACCAAGTAA CATTGATAG CGTTATAGCG CAATATAACAG TACA	234

(2) INFORMATION FOR SEQ ID NO: 3204:

- 10 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3204:

AACGCCATAA GCTACATGTA TGCTTCTTGC ATGGTTATCA TCCTCTCTTA ATGACTATCT	60
20 TTTAATTACG nAATGGCTTA CCAGTTTTA ACATATGTGC AATTCTTTCA TATGATTTTT	120
AGATTTAGTA GCATAAGCAA TTTCTCCACG TTGATGTACG TGATGTAATG ATTCTGGG	178

25 (2) INFORMATION FOR SEQ ID NO: 3205:

- 25 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 147 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3205:

35 TATTAATCAC GTTGTGTGTC GTTCGTGTTT TCGCAGTATT GATTTGTTGT TGCGCATTAT	60
GCATTGCATT ATTGTACTGC GTAATTGTAC CTGGCTTTT ACCTTCAGTG CTTACTGGnT	120
CATCTAAATG ATTITTAGCT GTGATTAA	147

40 (2) INFORMATION FOR SEQ ID NO: 3206:

- 45 (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 133 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3206:

CAGCTGTACT AGTTGAGCGT ATTATCCAAA ACATTTACG TGATGGCATT GATGTCGATC	60
GACTTTCACT CGTAACGTTT ACAAACTTAA GCGCACGTCA nATGAAGCAT CGTGTAGACC	120

(2) INFORMATION FOR SEQ ID NO: 3207:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 145 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3207:

TAGGGACTTT GAAGCGGAGA GTCTAATGCA TATGGGCAGC ATTATGATCA GCAACTGCTG	60
AGAAAAAATCC AGTTCTAGCT TGGGATTAA ATGTGGAGTG GnTTAATGAA TGCATTAAGA	120
AGCTGCAAGA ACTTATAAGT GTGCA	145

20 (2) INFORMATION FOR SEQ ID NO: 3208:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 131 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3208:

AAACGGTTTT AGATCGTATT CAATTGAAAA GGACCGGTAT TGAATGnAAT CACACTTAGC	60
AGCGATTGAT CAGaACATT TAAATTAACt TATTATCAA CGGTATATGA AGGGGATTG	120
GAAGATGCGT T	131

35 (2) INFORMATION FOR SEQ ID NO: 3209:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3209:

ATAAAATTAT CTATAATCTG TTGCTTGT TTnCTGTTCTA CAAcTATTcT CACATTAGGT	60
CCCGCATCCA TTGTAAAATA ACACGGATAC CCCGCTTCTC GGCATTcGTG AACAGCGCCA	120
TGACATCATA ACTTTCTGCA CAGTAGGAAC GGGGTG	157

50 (2) INFORMATION FOR SEQ ID NO: 3210:

- 55 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 143 base pairs

- (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

5 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3210:

AACGTAATAG ATATGGTACT TACTACATGG GAGAGAGTGC TAGATTACA AACGGCAATC	60
AACCAATCAC AGTAAGAGAA GTGGGGCCAT TCTTATCTnG TCCAGTGGGT TATCAGTTCC	120
AACCTGGTGG GTATTGTGAT TAT	143

10 (2) INFORMATION FOR SEQ ID NO: 3211:

- 15 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 137 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3211:

ATGCATACTG TATGTGTTCC AGCATATACA ATTTTGnCCA TCTTTAATGA CAACTGTACC	60
ATTTTCACA ACATTTAATT CATCTAATTTC CTTACCCPTC AAAGTTTATC TGTTGATCTC	120
GGTAAAATTA ATTCTGC	137

30 (2) INFORMATION FOR SEQ ID NO: 3212:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 239 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

40 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3212:

ATTCACGCTT TAAAGGACGT AAATACACGA CTAGGCTGTT TACCTTTAGA TCTAAATCAG	60
AACAATTTT TTACCATGGT GTTCCCCTTG AATTAGGAAT TTTATATAAA AATAAGCGGG	120
AAGCGTTGTG CCCCCGTTAC TCATAAGCTT TAATTAAATGC TAAATAGTCT GACACTAGCG	180
ATTTGATAAA ACTATACTAA AATTATTTAG AAGTCACTAA GATGCTAATG ACGACTAAT	239

45 (2) INFORMATION FOR SEQ ID NO: 3213:

- 50 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 150 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

55

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3213:

5	CATCCTCAGA GTAGGAATAG CCATACCATC GAATAATTCA CGTACTGTTT CGAATTGAGG	60
	TTCAAATTCT TGAGTTGTAT AGAGCTCGAA AATTTTGCC CATTAGCATA ATCAGACTTT	120
	TCAAAAGTCT TGATATTGTA TACCCACGCT	150

(2) INFORMATION FOR SEQ ID NO: 3214:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 399 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 15 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3214:

20	CTAACGCATTG GTTTAAACTA ATGTTCAAGAG CTTTnTGTGG TTTGTAAAnA CAAGTATATT	60
	nCGAGAACAC GTTTTGTAT AGAGTCTCAA TTATAAAAGT TAGAATAGTT GACAACAGTG	120
	TTACGATATT ATTAAACAAC TGTcTATCAT TAACGAAAGC AATTAACAAG AGTACTTGTT	180
25	GTGAAATCAT CGTTTAATAG TCAAAGATGA TCATCGTAGG gTAGACAACA TATCATTGAC	240
	TtAAGGAAGG GGAATGACCG ATGGGATTAA AAGATCAAGC TGTTACCTGG AGAAGGTATT	300
30	TTCATCAATT TCCAGAACTA TCCGATAAAAG AATTAAAGAC TACACAAAAA ATTAAAGATA	360
	TTTTAACAGA ACATCATATT AGAATATTAG ACTTACAC	399

(2) INFORMATION FOR SEQ ID NO: 3215:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3215:

40	CAGGTGAAAG CACAAGAGGA TTTGCTGTTT ATTTCTCTCC TGAAATTAAG AAATTCAATTG	60
45	CAGATAATTG AGATAAATAA TTAAAACCTA GACATTCAACC CAATCCTGAC AAAATATACT	120
	ATAACTAACCA TTTATTAAATA TATATTGCAT TATTTAATAT GCATCAAAGC CAATCACGr	180
50	TTGATTTCA CCAACTCAAT TGTTGATTGG TTTTATTTAT GTATGAATGA ACAACTTTTT	240
	GACATCATTA AGAATATAAA TGCCTTTGAA AGCATTGAA AGCnACAACA TTTCTATAAA	300
	ATTTTTCAAT AACAAATTGCG CCACTAAAAC TCAAAATTTC CACCACCAAC ATCCAAATTA	360

(2) INFORMATION FOR SEQ ID NO: 3216:

- 5 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

10 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3216:

AGTTGCATCA ACTGAATCCA ACGCTACGCA ATACGAATTA TTCCAATCTG GCATGCGTGT	60
TGGTAGAGAA ATTTTAGCGA CATCTCGAGC ACGGTTTACC TTGCCTTnT TGGTGGCCAA	120
CTTGCTTTAT GCTATGGGTT TTTCAAACCTT AAA	153

15 (2) INFORMATION FOR SEQ ID NO: 3217:

- 20 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 138 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

25 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3217:

CTTTGCATAT TCTGGTTGT AGTATTGATG GTCCGTCAAT TGTAGACCCA TCAATTGAG	60
CCATTACATA TGCGGAATAT CGAACGAAAC TTCAAGTTGC TTCAAGCTGG TAGAACACGC	120
AnATAAAATT ATTACATC	138

30 (2) INFORMATION FOR SEQ ID NO: 3218:

- 35 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3218:

CACTCCAAAC CAAGGATTAA CGTGCTTTAT ATnGAGGTAA AGCACATCAT GTKGTaATT	60
TTATGCMTTT TaTTGCMCMa GrATTAAgAG AAATTTAGC nTCTTTAGGT TTGAAACGTG	120
TAGAAGACTT AGTTGGAAGA ACTGATTAT TACAACGATC aTCAACATTA AAAGCGAATA	180
GCAAAGCGGC TAGTATTGAT GTTGAAAAC TGTTATGTCC TTTCGATGGG CCAAACACAA	240
AAGAAATTCA ACAAAATCAT AATCTTGAGC ATGGATTGTA TTTAACAAAT TTATATGAAG	300

AACAAACGTGA TGTAGGGGTT ATTACAGGTA GTGAGATTTC GAAACAATAT GGAGAAGCAG 420
 GACTTCCTGA AAATACAATT AATGTTTATA CGAATGGTCA TGCTGGTCAA AGTTTGCAGC 480
 5 ATATGCA 487

(2) INFORMATION FOR SEQ ID NO: 3219:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3219:

ACCAACTCGG AATCATGCAA TGAACACCAT GGTTGAAATA AGTGAATTGC ATAAGTATCC 60
 20 TGGCCTGGCA ATGCTGGTAT AACCTAAAAC CTTGTTGCAC GnAATGTATT CGCTACAATT 120
 AATGTACCTG CAAAACCGTT TAATAAGAAG TTGCAAATCG TTGCACCTGT ATATGG 176

25 (2) INFORMATION FOR SEQ ID NO: 3220:

- 25 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3220:

35 CTGATTAGG TAATCTTGCA GCAATTGTTT TTTTACAGTT TCGGCAAATG GGTGCCnGG 60
 CAAATAATAA TTGGCTATGC TCAAACCTGA ATTAATGGTG GGTGTGTCCG CCATCGTAAT 120
 TGGGnCCGCC TGAAGGGCCG CATATAAAATG ATAGTGCTCT TCCGAATAAA AGGTAGGCCA 180
 40 TATGTAATTG TTTTGTGGTT ACG 203

(2) INFORMATION FOR SEQ ID NO: 3221:

- 45 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3221:

AGCTAAATCT TGCCAATATG GTATCAACTT TTCATTCCAC TGATAATCAT AAATTCAGA 60

GCAATGCCAG AAATGTATTAA	ACAACTGGCA CGTCTAATAG ATTGCTAACG GATTGTTAC	180
GTACGTTCAT CGGCTTCTTT CGCTTCTATC GGATCTGGAG AATTGGGATG TTATGACCAC		240
5 TGAACCACTT ATTTGTAAGC TCTGTCGTGA TTGACTTCAT AATGCTTGCG CTTGnCCTCA		300
TTTCTAACAA CTCATCCTAC TTACnAAATT ACCCCnGGGG TACACCTGGT CCACCTTCATC		360
A		361

10 (2) INFORMATION FOR SEQ ID NO: 3222:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 152 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

20 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3222:

GGGGCTCCGn GGAGGCAGG GTAGAAAATG ATGTAACGC TGCATTACTA GGCGAATTGA	60
AATTACATCA ATATCAAGCA GAACGGATCT TTTGTATGAC GCTTGGTACA GGCATTGGGG	120
25 GTGCGTACAA GAATTAATCA AGGTTCATGT TG	152

(2) INFORMATION FOR SEQ ID NO: 3223:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 123 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

35 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3223:

TTTGTAAAT ATAGGCCCTG CAATGAGTGT ACTGGAATGG CAATAATCAT ACCATACAGT	60
40 AATACATCTC CAACATTTGC CTThAATTCT TTTCCCATGA CTACCGGTCC TGGGATGTGG	120
TGG	123

(2) INFORMATION FOR SEQ ID NO: 3224:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

50 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3224:

TGGTTGGTAA CCGTAAATTA ATGCCTGACA ATGATATTAG CTnCCTAAGC ATATTTCTGA 120
 TGATTTAACCA CATTATGAAA CGAGA 145

5 (2) INFORMATION FOR SEQ ID NO: 3225:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 129 base pairs
 (B) TYPE: nucleic acid
 10 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3225:

GGTATTGTCT AGTCAATTAC TAACACCATT TAATTGTGGn AAGCAAAAGC TAAAGGTTAT 60
 CGTGCCTAT TGCAGGCATT GATGCTTCCA ACAAAAGTCGA GTATTCAAGTT GCATCAAAAG 120
 20 TTTGCTTTT 129

(2) INFORMATION FOR SEQ ID NO: 3226:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 170 base pairs
 25 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

30 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3226:

GACACTACCG TTCCCACGTA GCATCAATCG TCTCAGTCGC ATCGTAGTCA TCTGTATGTG 60
 35 TTCCAGCATA TACAATTTG CCATCTTAA TGACAACGTA CCATTTCAC AACATTTATT 120
 CATCTAnTCC TACCCCTCAAA GTTATCGTTG ATCTCGTAAA TAGTCGGCAA 170

(2) INFORMATION FOR SEQ ID NO: 3227:

- 40 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 140 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

45 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3227:

TTACTGCTTT ACGTTTATCA TTTTCTAATT CAnAAATTG TCATTCAGTT TCAACTTTAT 60
 50 CGACAGCTGG ACTTTGCGCA GATAAAATGTG CTGCTGTAAT ATCTAACACA TCGATTGCTC 120
 TTATCTGGCA ATAATCGTTG 140

55

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 120 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3228:

GCGCCTATAA TTGCGCTACT TGATTTAATT GAGTAGATAA ATCTAATCCG AATAAAATCCG 60
TGACTTGCTT GATAAAATAGC AACAAATGCTn CAACTAAACC AGTTAGTACT GCTTTGTTTT 120

(2) INFORMATION FOR SEQ ID NO: 3229:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3229:

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GGCTATACAC CGACTACAGT AACATCTGGT AGCGACATTG AAAAAGACTC TAATGGTTTA 60
ACAACAAACAG GTGTTATTAA TGGTGCTGAT AACATGTACA TTAGATAGTG GnTTCTACA 119

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(2) INFORMATION FOR SEQ ID NO: 3230:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3230:

TGGGAATAGC AACCAACAAT GCGACAAACAA AGCCCGCTAC AAATCTCCAT nAACTAATTG 60
CTAAATGTTG GAAAAATTTC TCCAGTCAAC AATGAAAGGC CATATGACTT TTTCTTACAA 120
GACCGCGCC 128

(2) INFORMATION FOR SEO ID NO: 3231:

- (i) SEQUENCE CHARACTERISTICS:

 - (A) LENGTH: 123 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

AATGCAGCTA TTACTTTCA CAGATTCCAT ATCGTTCAAC ATTTAAATAG AGAACCTTAAT	60
AAGTATCGTG TACAAGTTAT GAATGANTAC CGTAATAAAA AAGGACCTGA TTATACAATT	120
TTC	123

(2) INFORMATION FOR SEQ ID NO: 3232:

- 10 (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 1656 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

15 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3232:

GCCTCAAAGA ACATGCTGAA CAGTCATCGC aTTCATATAG TTTGAAGTCT CGTTTAAAC	60
CATATCTATC ATTACGGTAT GCATATCTTT TAAAACCTAT TCTTTGTGA TTAGGACATA	120
TAAATTCAATC ATTAAGTTCG TCATATTTCC AATTTGAGT GTCGAAAATG TCACTTTAA	180
ACTTTCTAGT TTTATCTTTA ATAAACATGC CATACTGAAT AAGTGGCGTT TTATTAAT	240
CATCTATAAT GGCCATATAG TTTGCTCAC TACCATAACC TGCACTAGCT ACAAAATAACC	300
GAAGTATTGT GAATCATTGT TAAAAATGGA ATTAAAGTTC TAGTATCTGT CGGGTTTGA	360
AATAGGTCA AGGATAAAAC AAATTGAGAA TTTGTCGCTA TTTGTAATT GTATCTGGC	420
TTAAGTTGGC CATTTCAT ATGGTCTTCC TTCATTCTCA TAAAAGTTGC ATCATGATCA	480
GTTTTAGAAA ArCTATTTCT ATCTTTAAGA ATCGATTTTT GTTCTTCATA TTTATTTTT	540
CTTTCGGAAT AATCATCAA TTTTTTG AACTCTTAA TCTTAGTTCT TTTTtaCGGG	600
TCTGTTTCT AATTTGAGTA CTATCTCGT TCTCAATAGA ATGATTTAAA yCTTCGATTT	660
CTTTATCTAA ATGACTACCA ATTAAATCTA TTTCTTCTAT TGTTAAATCG CTATCTCCAT	720
CTTCTTTTAT CTCTGGTATT ATTTTTCTT CAACTAAGTC ACGATATAAT GTTTTTGAAT	780
TTTCGTTCAA TTTGATTTCG TGATTTGAA TACTTTCTT CCACACAAAT GTATACCTAT	840
TGGCATTAGC TTCTACTTT GTACCCTCAA TAAGATTTG CTTAAACAT TGACTATGAA	900
ACTGGATAAA TAAAGATTCA ATTAACGCA CAGTATTAGG ATTCACTCTA ATACGATTAA	960
TAGTTTTATA AGAAGGTGTT TGATTTGAG CTAACCCACAT CATTGAAATA CTGTCATGAA	1020
GTAATTTCTC TATTCTACGA CCAGAAAATA CAGATTGAGT ATATGCATAT AAGGTGATTT	1080
TTAACATCAT TTTGGATGA TAGGATGTTG CGCCACGATG ATGTCTGAAT TTATCGAATT	1140
CGCTATCAGG TATCGTTCA ACAATTTCAT TAACATATCG CGAAATATCA ATTTGAGGAA	1200